SOIL SURVEY REPORT
MAPS AND INTERPRETATIONS
LAKE COUNTY AREA, FLORIDA

United States Department of Agriculture
Soil Conservation Service
in cooperation with
University of Florida
Agricultural Experiment Stations

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HOW THIS SURVEY WAS MADE

Soil scientists made this survey to learn what kinds of soils are in the area, where they are located, and how they can be used. The soil scientists went into the area knowing they likely would find many soils they had already seen and perhaps some they had not. As they traversed the landscape, they observed the drainage and the kinds of native plants or crops, and many facts about the soils. They dug or bored holes to a depth of about six and one-half feet or less to expose soil profiles. A profile is the sequence of natural layers, or horizons, in a soil; it extends from the surface down into the parent material that has not been changed much by leaching or by the action of plant roots.

The soil scientists made comparisons among the profiles they studied, and they compared these profiles with those in counties nearby and in places more distant. They classified and named soils according to nationwide, uniform procedures. The soil series and the soil phase are the categories of soil classification most used in a local survey.

Soils that have profiles almost alike make up a soil series. Except for different texture in the surface layer, all the soils of one series have major horizons that are similar in thickness, arrangement, and other important characteristics. Each soil series is named for a town or other geographic feature near the place where a soil of that series was first observed and mapped. Astatula and Orlando for example, are the names of two soil series. All the soils in the United States having the same series name are essentially alike in those characteristics that affect their behavior in the undisturbed landscape.

When soils are found that do not have the properties of a named soil series, they are named temporarily in one of two ways. If the soil is similar to a soil series except for varying in some property, such as soil reaction, texture, thickness of a major horizon, etc., the soil is called a variant of that series. When a soil is found that is not similar to a named soil series, it is given an appropriate scientific name according to its soil taxonomic classification. An example of this is Fluvaquents. When sufficient acreage of these new soils has been mapped to form a concept and to establish a range of properties, they become a new soil series and are named as explained in the preceding paragraph.

Soils of one series can differ in texture of the surface layer and in slope, or some other characteristic that affects use of the soils by man. On the basis of such differences, a soil series is divided into phases. The name of a soil phase indicates a feature that affects management. For example, Astatula sand, 0 to 5 percent slopes is a phase of the Astatula series.

After a guide for classifying and naming the soils has been worked out, the soil scientists draw the boundaries of the individual soils on aerial photographs. These photographs show woodlands, buildings, field borders, trees, canals, ditches, roads, and other details that help in drawing boundaries accurately. The soil maps were prepared from the aerial photographs.

The areas shown on a soil map are called map units. On most maps detailed enough to be useful in planning the management of farms and fields, a map unit is nearly equivalent to a soil phase. It is not exactly equivalent because it is not practical to show on such a map all the small, scattered bits of soil of some kind that have been seen within an area that is dominantly of a recognized soil phase.

Some map units are made up of soils of different series, or of different phases within one series. One kind of such map unit is called an undifferentiated group.

While a soil survey is in progress, soil scientists take soil samples needed for laboratory measurements and for engineering tests. Laboratory data from the same kind of soil in other places are also assembled. Data on yields of crops under defined practices are assembled from farm records and from fields or plot experiments on the same kind of soil. Yields under defined management are estimated for the soils suitable for a crop.

Soil scientists observe how soils behave when used as a growing place for native and cultivated plants, and as material for structure, foundations for structures, or covering for structures. They relate this behavior to properties of the soils. For example, they observe that filter fields for onsite disposal of sewage fail on a given kind of soil, and they relate this to the slow permeability of the soil or its high water table. They see that streets, road pavements, and foundations for houses are cracked on a named kind of soil and they relate this failure to the high shrink-swell potential of the soil material. Thus, they use observation and knowledge of soil properties, together with available research data, to predict limitations or suitability of soils for present and potential uses.

After data have been collected and tested for the key soils in a survey area, the soil scientists set up trial groups of soils. They test these groups by further study and by consultation with farmers, agronomists, engineers, and others. They then adjust the groups according to the results of their studies and consultation. Thus, the groups that are finally evolved reflect up-to-date knowledge of the soils and their behavior under current methods of use and management.

HOW TO USE THIS REPORT

This report contains information that can be applied in managing farms, ranches, and woodlands; help in selecting sites for roads, ponds, buildings, and other structures; and in judging the suitability of tracts of land for farming, industry, and recreation.

Locating Soils

All the soils of this area are shown on the detailed map(s). Each map sheet is numbered to correspond with a number on the Index to Map Sheets. To locate the soil map sheet that includes the specific area in which you are interested, refer to the Index to Map Sheets.

On each map sheet soil areas are outlined and are identified by symbols. All areas marked with the same symbol in this survey area are the same kind of soil. The soil symbol is inside the area if there is enough room; otherwise, it is outside and a pointer shows where the symbol belongs.

Using Interpretation Tables to Find Soil Information

All soil interpretations in this report are in tabular form. To find the desired soil interpretation, first refer to the appropriate table that addresses the intended use. Second, use the conversion legend to find the symbol and soil name to locate the soil interpretation. Say for example you are interested in the yield of watermelons per acre on an area of land that is mapped with the symbol AbB(55). First, you would go to Table B1 Land Capability Classes and yield Per Acre of Crops and Pasture. Second, you would find soil number 55 and read that it will produce up to 10 tons of watermelons per acre under a high level of management.

KINDS OF INTERPRETATIONS AND INFORMATION IN THIS REPORT

Before using the information listed in the interpretation tables read and become familiar with the explanations of the interpretation tables given in the section, "USE AND EXPLANATION OF SOIL INTERPRETATION TABLES."

The tables are the key source of information in this report. The soils are rated as to their suitability as resource material, as to their degree of limitations for several selected uses, such as dwellings, septic tank filter fields, etc., and for recreation. The major features affecting the soil for these uses are also shown. Other information and interpretations given are the capability, soil loss factors, and potential yields for the soil, wildlife suitability, woodland suitability, and range.

PREPARING INTERPRETIVE MAPS FROM THE SOIL MAPS

Individual maps showing the relative limitations of soils for many specific purposes can be developed by using the soil map and the interpretations. Ratings can be shown visually by coloring soil maps or transparent overlays according to the traffic-light color connotations to point up the limitations for a particular use. A map or overlay can be made in this manner for septic tank filter fields, dwellings, or for any of the uses for which the soils are rated. For example, soil areas that have a slight limitation for a given use can be colored green, those with a moderate limitation can be colored yellow, those with a severe limitation colored red, and those with a very severe limitation colored brown or purple to contrast with the traffic light colors. Once the interpretive map is complete, the patterns of the soil limitations are readily apparent. The use can quickly select areas that have potential for a particular type of development and at the same time identify the areas of severe limitations.

USE AND EXPLANATION OF SOIL INTERPRETATION TABLES

Introduction

The interpretation tables should be used only with soil surveys of medium or detailed intensity, that have been prepared according to standard procedures of the National Cooperative Soil Survey., It is not intended that they be used with "Land-Type Surveys," low intensity surveys, or general soil maps. The interpretations are for soils in their natural state and not for disturbed areas that are altered by cut or fill operations, or by drainage.

The soil interpretations will not eliminate the need for on-site sampling, testing, and study of specific sites for design and construction of engineering works and various uses. The interpretation tables should be used primarily to plan more detailed field investigations to determine the conditions of the soil at the proposed site for the intended use.

When the interpretation tables are used in connection with delineated soil areas on soil maps, the information pertains to the dominant soil for which the soil is named. Other soils, too small an area to map out, may occur within the soil map area. The interpretations ordinarily do not apply to the included soils. More detailed studies are required if small, specific sites are to be developed or used within a given soil area. For example, a soil map bearing the name Myakka sand also can include small, unmappable areas of other soil such as Cassia and Wabasso. The interpretations apply only to the Myakka part of the delineated soil area and not to the entire soil area.

Table B1 - LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

Introduction

In this table the different phases of the soil series are rated into capability classes and subclasses. The potential yields under high level management are estimated for important crops that the soil is suited for.

Explanation and Discussion of Items

Class Determining Phase--Soil series are divided into phases on the basis of difference in slope, texture of the surface layer, or some other characteristic that affects use of the soils by man.

Capability--In this column the different phases of the soil series are grouped according to capability classes and subclasses. Capability grouping shows in a general way, the suitability of soils for kinds of

field crops. The groups are made according to the limitations of the soils when used for field crops, the risk of damage when they are used, and the way they respond to treatment. The grouping does not take into account major and generally expensive landforming that would change slope, depth, or other characteristics of the soils; does not take into consideration possible but unlikely major reclamation projects; and does not apply to rice, cranberries, horticultural crops, or other crops requiring special management.

Capability Classes, the broadcast groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use, defined as follows:

Class I	Soils have few limitations that restrict their use.
Class II	Soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
Class III	Soils have severe limitations that reduce the choice of plants, require special conservation practices, or both.
Class IV	Soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
Class V	Soils are not likely to erode but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife.
Class VI	Soils have very severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, range, woodland or wildlife.
Class VII	Soils have very severe limitations that make them unsuited to cultivation and restrict their use largely to pasture, range, woodland, or wildlife.
Class VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife, water supply or to aesthetic purposes.

Capability subclass are soil groups within one class; they are designated by adding a small letter, e, w, or s to the class numeral, for example, IIe. The letter e shows that the main limitation is risk of erosion unless close growing plant cover is maintained; w shows that water in or on the soil surface interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony.

In Class I there are no subclasses, because the soils of this class have few limitations. Class V can contain, at the most, only the subclass indicated by w and s because the soils in Class V are subject to little or no erosion, though they have other limitations that restrict their use largely to pasture, range, woodland, wildlife, or recreation.

Potential Yields Predicted yields are for principal crops grown on the soil. The predictions are based on estimates made by farmers, county extension agents and on information taken from research data. The predicted yields are average yields per acre that can be expected by good commercial farmers at the level of management which tends to produce the highest economic returns.

Table E - WOODLAND MANAGEMENT AND PRODUCTIVITY

Introduction

In this table the soils are evaluated for their suitability for woodland. Each soil is given a woodland ordination symbol. The soils are evaluated for woodland management problems, and the potential productivity of important trees is estimated. Trees to plant are also given.

Ordination Symbol The ordination symbol serves to group soils that are suited to about the same kinds of trees and that have about the same potential productivity.

Each woodland ordination symbol is identified by a 2-part symbol. The first part of the symbol indicates the potential productivity of the soil for the indicator species in cubic meters per hectare. The larger the number, the greater the potential productivity. Potential productivity is based on the site index and the point where mean annual increment is the greatest. The second part of the symbol, a letter, indicates the important soil property that imposes a moderate or severe hazard or limitation in managing the soils for wood production. The letter x shows that the main limitation is stoniness or rockiness; w shows that excessive water in or on the soil is the chief limitation; t shows that toxic substances in the soil are the chief limitation; d shows that the rooting depth is restricted; c shows that clay in the upper part of the soil is a limitation; s shows the soils are sandy; f shows that the soils have large amounts of coarse fragments; r shows the soils have slopes; and o shows the soils have no significant restrictions or limitations for woodland use or management.

Management problems evaluated are (1) erosion hazard, (2) equipment limitations, (3) seedling mortality, (4) windthrow hazard, and (5) plant competition.

(1) Erosion hazard measures the risk of soil losses in well-managed woodland. Erosion hazard is slight if expected soil loss is small, moderate if some measures to control erosion are needed in logging and construction, and severe if intensive treatment or special equipment and methods are needed to prevent excessive soil losses.

(2) Equipment limitations ratings reflect the soil conditions that restrict the use of equipment normally used in woodland management or harvesting. Slight ratings indicate equipment use is not limited to kind or time of year. A rating of moderate indicates a seasonal limitation or need for modification in methods of equipment. Severe limitations indicate the need for specialized equipment or operations.

(3) Seedling mortality ratings indicate the degree of expected mortality of planted seedlings when plant competition is not a limiting factor. Normal rainfall, good planting stock and proper planting are assumed. A slight rating indicates expected mortality is less than 25 percent. Moderate rating indicates a 25 to 50 percent loss; and severe indicates over 50 percent loss of seedling.

(4) Windthrow hazard ratings reflect the danger of trees being blown over by wind. A rating of slight indicates that normally there are no trees blown down by the wind, a rating of moderate that some trees are expected to blow down during periods of excessive soil wetness and high wind, and a rating of severe that many trees are expected to blow down during periods of soil wetness with moderate or high winds.

(5) Plant competition refers to the invasion or growth of undesirable species on different kinds of soil when openings are made in the canopy. A rating of slight indicates that competition will not prevent adequate natural regeneration and early growth or interfere with adequate development of planted seedlings, a rating of moderate that competition will delay natural or artificial regeneration, both establishment and growth rate, but will not prevent the eventual development of fully stocked normal stands and a rating of severe that competition will prevent adequate natural or artificial regeneration without intensive site preparation and maintenance treatments such as weeding.

Common Trees -- This is a list of some of the commercially important trees which are adapted to the soil. These are the trees which woodland managers will generally favor in intermediate or improvement cuttings.

Site Index-- This is the average height of dominant trees at age 50. For Slash Pine site index given is for age 25 years.

Productivity Class represents an expected volume produced by the most important trees, expressed in cubic meters per hectare per year. Cubic meters per hectare can be converted to cubic feet per acre by multiplying by 14.3. It can be converted to board feet by multiplying by a factor of about 71; or to convert cubic feet per acre to cords per acre, divide the cubic feet by 85. For example, a productivity class of 8 means the soil can be expected to produce 114 cubic feet per year at the point where mean annual increment culminates, which is about 568 board feet per acre per year; or about 1.3 cords per acre per year.

Trees to Plant -- This is a list of trees suitable to plant for commercial wood production.

Table F - WILDLIFE HABITAT

Introduction

Soils directly influence kinds and amounts of vegetation and amounts of water available, and in this way indirectly influence the kinds of wildlife that can live in an area. Soil properties that affect the growth of

wildlife habitat are: (1) thickness of soil useful to crops, (2) surface texture, (3) available water capacity to a 40-inch depth, (4) wetness, (5) surface stoniness or rockiness, (6) flood hazard, (7) slope, and (8) permeability of the soil to air and water.

In this table, soils are rated for producing eight elements of wildlife habitat and for three groups, or kinds, of wildlife. The ratings indicate relative suitability for various elements. A rating of good means the element or kind of habitat generally is easily created, improved, and maintained. Few or no limitations affect management in this category and satisfactory results are expected when the soil is used for the prescribed purpose.

A rating of fair means the element or kind of habitat can be improved, maintained, or created in most places. Moderate intensity of management and fairly frequent attention may be required for satisfactory results, however.

A rating of poor means the element of wildlife and limitations for the designated use are rather severe. Habitats can be improved, maintained, or created in most places, but management is difficult and requires intensive effort.

A rating of very poor means the elements of wildlife habitat are very severe and that unsatisfactory results are to be expected. It is either impossible or impractical to improve, maintain, or create habitats on soils in this category.

Explanation of Items

Potential for habitat elements -- Each soil is rated according to its suitability for producing various kinds of plants and other elements that make up wildlife habitats. The ratings take into account mainly the characteristics of the soils and closely related natural factors of the environment. They do not take into account climate, present use of soils, or present distribution of wildlife and people. For this reason, selection of a site for development as a habitat for wildlife requires inspection at the site.

Grain and seed are annual grain-producing plants such as corn, sorghum, millet, and soybeans.

Grass and legumes -- Making up the group are domestic grasses and legumes that are established by planting. They provide food and cover for wildlife. Grasses include bahiagrass, ryegrass, and panicgrass; legumes include annual lespedeza, shrub lespedeza, and other clovers.

Wild herbaceous -- This group consists of native or introduced perennial grasses, forbs, and weeds that provide food and cover for upland wildlife. Beggarweed, perennial lespedeza, wild bean, pokeweed, and cheatgrass are typical examples. On rangeland, typical plants are bluestem, grama, perennial forbs and legumes.

Hardwood trees are nonconiferous trees, shrubs, and woody vines that produce wildlife food in the form of fruits, nuts, buds, catkins, or browse. Such plants commonly grow in their natural environment, but they may be planted and developed through wildlife management programs. Typical species in this category are oak, beech, cherry, dogwood, maple, viburnum, grape, honeysuckle, greenbrier, and silverberry.

Coniferous plants are cone-bearing trees and shrubs that provide cover and frequently furnish food in the form of browse, seeds, or fruitlike cones. They commonly grow in their natural environment, but they may be planted and managed. Typical plants in this category are pines, cedars, and ornamental trees and shrubs.

Wetland plants are annual and perennial herbaceous plants that grow wild on moist and wet sites. They furnish food and cover mostly for wetland wildlife. Typical examples of plants are smartweed, wild millet, spikerush and other rushes, sedges, burred, tearthumb, and aneilema. Submerged and floating aquatics are not included in this category.

Shallow water -- This includes impoundments or excavations for controlling water, generally not more than five feet deep, to create habitats that are suitable for waterfowl. Some are designed to be drained, planted, and then flooded; others are permanent impoundments that grow submerged aquatics.

Potential as habitat for -- The soils are rated according to their suitability as habitat for (1) openland wildlife, (2) woodland wildlife, and (3) wetland wildlife. These ratings are related to ratings made for elements of habitat. For example, soils rated unsuited for shallow water developments are rated unsuited for wetland wildlife.

(1) Openland wildlife are birds and mammals that normally live in meadows, pastures, and open areas where grasses, herbs, and shrubby plants grow. Quail, doves, meadowlarks, field sparrows, cottontail rabbits, and foxes are typical examples of openland wildlife.

(2) Woodland wildlife are birds and mammals that normally live in wooded areas of hardwood trees, coniferous trees, and shrubs. Thrushes, wild turkeys, vireos, deer, squirrels, and raccoons are typical examples of woodland wildlife.

(3) Wetland wildlife are birds and mammals that normally live in wet areas, marshes, and swamps. Ducks, geese, rails, shore birds, and herons are typical examples of wetland wildlife.

Rangeland wildlife is not rated in Florida since woodland wildlife is rated and is applicable to Florida conditions and soils.

Table G - RECREATIONAL DEVELOPMENT

Soils are rated according to limitations that affect their suitability for camp areas, picnic area, playground, and paths and trails and golf

fairways. Not considered in this rating, but important in evaluation of a site are location, accessibility of the areas, size and shape of the area and its scenic quality, the ability of the soil to support vegetation, access to water, potential water impoundment sites available, and either access to public service lines or capacity of the soil to absorb septic tank effluent. Soils subject to flooding and the season when it occurs are important considerations. Onsite assessment of duration and frequency of flooding is essential in planning recreational facilities.

(a) Camp Areas are tracts of land used intensively for tents, trailers and campers, and the accompanying activities of outdoor living. Camp areas require such site preparation as shaping and leveling, areas for tent and parking area, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The soils are rated on the basis of soil properties that influence the ease of developing camping areas and the performance of the camping area after development. Soil properties that influence trafficability and promote the growth of vegetation after heavy use are important.

Slope, stoniness, and depth to bedrock or cemented pan are the main concerns in development camp areas. For good trafficability, the surface of the picnic areas should absorb rainfall readily, remain firm to heavy foot traffic, and not be dusty when dry. Soil properties that influence trafficability are texture of the surface layer, wetness, permeability and large stones. Slow permeability and clayey surface texture are not as severe a limitation in dry regions of the country, however, silty soils may be more of a problem because they are dusty. Soil properties that influence the growth of plants are depth to bedrock, permeability, and the presence of toxic materials.

(b) Picnic areas are natural or landscape tracts used primarily for preparing meals and eating outdoors. These areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking lots. Soils are rated on the basis of properties that influence development costs of shaping sites, trafficability, and growth of vegetation after development.

Slope and stoniness are the main concerns in developing picnic area. For good trafficiability, the surface of picnic areas should absorb rainfall readily, remain firm to heavy foot traffic, and not be dusty when dry. Soil properties that influence trafficability are texture of the surface layer, wetness, permeability, and large stones. Slow permeability and clayey surface texture are not as severe a limitation in dry regions of the country; however, the silty soils may be more of a problem because they are dusty. Soil properties that influence the growth of plants are depth to bedrock, permeability, and the presence of toxic materials.

(c) Playgrounds are areas used intensively for games such as baseball, football, and similar activities. Playgrounds require a nearly level

soil that is free of stones and that can withstand heavy foot traffic and still maintain adequate vegetation. Soils are rated on the basis of properties that influence cost of shaping, trafficability, and growth of vegetation.

(d) Paths and Trails are used for walking, horseback riding, and other uses and require little or no cutting or filling. The soils are rated on the properties that influence trafficability and erodibility.

These are stoniness, wetness, texture of the surface layer, slope, flooding, erodibility, and in dry regions, dustiness.

(e) Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. The best soils for use as golf fairways are firm when wet, are not dusty when dry, and are not subject to prolonged flooding during the period of use. They have moderate slopes and no stones or boulders on the surface. The suitability of the soil for tree or greens is not considered in rating the soils.

Table H - ENGINEERING INDEX PROPERTIES

Introduction

This table gives estimates of the engineering classification and of the range of index properties for major layers of each soil in the survey area. Although the soils bearing the same name are similar between counties and states, the physical and chemical properties of these soils may vary somewhat from one county to another and one state to another; however, the properties of the soil at any location should fall within the range of the estimates given for the soil series on the interpretation table. For some soils, some of the physical and chemical properties are based on test data; in others, these are best estimates based on test data on similar soils.

Explanation of Items

Depth (In.)--The depth in inches of the major soil horizons that have similar properties are given in this column.

USDA Texture--The USDA texture is based on the relative amounts of sand, silt, and clay in a soil, giving rise to textural classes such as sand, sandy loam, loam, clay loam, and clay. (USDA Handbook No. 18, SOIL SURVEY MANUAL)

Unified Classification--In the Unified System, soils are classified according to particle size distribution, plasticity, liquid limit, and organic matter. Soils are grouped in 15 classes. There are eight classes of coarse-grained soils, identified as GW, GP, GM, GC, SW, SP, SM, and SC; six classes of fine-grained soils, identified as ML, CL, OL, MH, CH, and OH; and one class of highly organic soils, identified as PT. Soils on the borderline between two classes are designated by symbols for both classes; for example, SP-SM.

AASHO Classification--The AASHO system is used to classify soils according to those properties that affect use in highway construction and maintenance. In this system, a soil is placed in one of seven basic groups ranging from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. In group A-1 are gravelly soils of high bearing strength, or the best soils for subgrade (foundation). At the other extreme, in group A-7, are clay soils that have low strength when wet and that are the poorest soils for subgrade. The A-1, A-2, and A-7 groups can be further divided as follows: A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, and A-7-6.

Fraction Greater than 3 inches (Pct.)--Most soils in Florida do not have material this coarse. Soils that have a high content of shell may have a small percentage of shells larger than 3 inches. Soils in Florida that contain pebbles larger than 3 inches are rare.

Percentage of Material Less than 3 inches Passing Sieve No.--The measured or estimated percentages of materials passing the numbers 4, 10, 40, and 200 sieves are given for each major horizon. The percent passing the 200 sieve approximates the amount of silt and clay, but does includes some very fine sand. A range is listed because of variability for a given soil.

Liquid Limit and Plasticity Index--These indicate the effect of water on the strength and consistence of soil material. As the moisture content of a clayey soil is increased from a dry state, the material changes from a semisolid to a plastic state. If the moisture content is further increased, the material changes from a plastic to a liquid state. The plastic limit is the moisture content at which the soil material changes from the semisolid to plastic state; and the liquid limit from a plastic to a liquid state. The plasticity index is the numerical difference between the liquid limit and the plastic limit. It indicates the range for moisture content within which a soil material is plastic.

Table J - PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

This table shows estimates of some characteristics and features that affect soil behavior. These estimates are given for major layers of each soil in the survey area.

Explanation of Items

Clay (Pct.)--The measured or estimated percentages of a mineral soil separate consisting of particles less than 0.002 millimeter in diameter. A range is given because of the variability for a given soil.

Moist Bulk Density--The mass (weight) of a unit volume of moist soil. This volume includes both soil and pores. Soils that are loose and porous will have low bulk densities and those that are more compact will have high values. A range is listed because of the variability for a given soil.

Permeability (In./Hr.)--That quality of a soil that enables it to transmit water or air. Values listed are estimates of the range in rate and time it takes for downward movement of water in the major soil layers when

saturated, but allowed to drain freely. The estimates are based on soil texture, soil structure, available data on permeability and infiltration tests, and drainage observations of the water movement through soils. On a given soil, percolation through the surface layer varies according to land use and management as well as with initial moisture content. The permeability is shown in inches per hour. For example, in a soil that has a permeability rate of 6.0 inches per hour in 3 hours free water would move downward a distance of (3 x 6") 18 inches.

Available Water Capacity (In./In.)--The ability of soils to hold water for use by most plants. The available water capacity is given in inches per inch of soil for major horizons. The water retention of the soil is related to the particle size, organic matter content, and to the arrangement and size of soil pores. Fine-texture soils tend to have higher water retention due to small pores than do sandy soils with large pores. Estimates of the available water capacity for soils with normally high water tables may appear meaningless until one considers the possibility of artificial drainage or the natural lowering of the water table during dry seasons. Soils of the same series vary from place to place. Therefore, values can deviate considerably from those listed. It is commonly defined as the difference between field capacity (1/3 atmosphere for loamy and clayey materials or 1/10 atmosphere for sand) and the wilting percentage (15 atmospheres) times bulk density times the thickness in inches of the soil. The formula for AWC is:

$$\text{AWC (in/in)} = \frac{\text{1/3 (or 1/10) bar \% - 15 bar \% x bulk density, moist}}{100}$$

For example, in a soil that has an available water capacity of 0.10 in/in of soil, there would be 0.1 inch of water available for plant growth for each inch of soil, and in 24 inches of soil (0.1 x 24") 2.4 inches available.

Soil Reaction--The degree of acidity or alkalinity of a soil. It is expressed in pH - the logarithm of the reciprocal of the H-ion concentration. A soil that tests to pH 7.0 is precisely neutral in reaction because it is neither acid nor alkaline. In words, the degrees of acidity or alkalinity are expressed thus:

	pH
Extremely acid	Below 4.5
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Medium acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Mildly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Salinity (mmhos/cm)--The salinity is expressed in terms of the electrical conductivity of a saturation extract in millimhos per centimeter at 25

degrees centigrade. The following shows the response of plants associated with different ranges for electrical conductivity of saturation extracts of soils.

Electrical Conductivity of Saturation Extract mmho/cm at 25° C	Plant Response
0-2	Salinity effects usually negligible
2-4	Yield of very salt-sensitive crops may be restricted
4-8	Yield of salt-sensitive crops restricted
8-16	Only salt-tolerant crops yield satisfactory
16	Only a few very salt-tolerant crops yield satisfactory

If salinity is zero or no problem for growing crops, a dash is shown on the interpretation sheet. Except for areas of tidal marsh or tidal swamp along the coasts, salinity is of no importance in Florida soils.

Shrink-swell Potential--The relative change in volume to be expected of soil material with changes in moisture content; that is, the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils cause much damage to building foundations, roads, and other structures. A high shrink-swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating.

Erosion Factors, (K and T)--A soil erodibility factor (K) and the soil-loss tolerance (t) are used in an equation that predicts the amount of soil loss resulting from rainfall erosion of cropland. The soil erodibility factor "K" is measure of the rate at which a soil will erode. Values are expressed as tons of soil loss per acre per unit of R (rainfall factor) from continuous fallow (three years or more) on a 9 percent slope, 73 feet long. Thus, the K factor reflects the rate that soil erodes when other factors affecting erosion are constant. Soil properties that influence erodibility by water are: those that affect infiltration rate, movement of water through the soil, and water storage capacity; and those that resists dispersion, splashing, abrasion, and transporting forces from rainfall and runoff. Some of the soil properties that are most important are texture and organic matter of the surface layer, size and stability of structural aggregates in the surface layer, permeability of the subsoil, and depth to slowly permeable layers.

The soil-loss tolerance "T" sometimes called permissible soil loss, is the maximum rate of soil erosion that will permit a high level of crop productivity to be sustained economically and indefinitely. These rates are expressed in tons of soil loss per acre per year. Rates of 1 through 5 tons are used in the south, depending upon soil depth and prior erosion.

Wind Erodibility Groups--Soils that are subject to wind erosion are grouped into 8 groups according to their susceptibility to soil blowing. Sandy soils are most susceptible to soil blowing, especially during dry periods when wind velocities are high. Organic soils are normally wet, but they are also subject to soil blowing when drained and cultivated if the soil surface is left bare during extreme dry periods and wind velocities are high.

Organic Matter (Pct.)--The measurement of estimated percentage of the organic fraction of the soil that includes plant and animal residues at various stages of decomposition, cell and tissues of soil organisms, and substances synthesized by the soil population. It is commonly determined as the amount of organic material contained in a soil sample passed through a 2-millimeter sieve. Estimates of organic matter are given only for the surface layer.

Table K - SOIL AND WATER FEATURES

This table gives estimates of various soil and water features. The estimates are used in land use planning that involves engineering considerations.

Explanation of Items

Hydrologic Groups--Soils are grouped into four hydrologic soil groups, A through D. These groups are used mostly in watershed planning to estimate runoff from rainfall. Soil properties were considered that influence the minimum rate of infiltration obtained for a bare soil after prolonged wetting. These properties are: depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a layer or layers that slow or impede water movement.

Dual hydrologic groups are given for wet soils rated D in their natural condition that can be adequately drained. It is considered that drainage is feasible and practical and that drainage improves the hydrologic group by at least two classes (from D to A or B). The first letter applies to the drained condition.

Hydrologic Group A--(Low runoff potential) Soils that have high infiltration rates even when thoroughly wetted and a high rate of water transmission.

Hydrologic Group B--(Moderately low runoff potential) Soils that have moderate infiltration rates when thoroughly wetted and a moderate rate of water transmission.

Hydrologic Group C--(Moderately high runoff potential) Soils that have slow infiltration rates when thoroughly wetted and a slow rate of water transmission.

Hydrologic Group D--(High runoff potential) Soils having very slow infiltration rates when thoroughly wetted and a very slow rate of water transmission.

Flooding--Flooding is defined as temporary covering of soil surface by water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or combinations of these. Shallow water standing during or shortly following a rain is excluded from the definition of flooding. Marshes and swamps are excluded from the definition of flooding because water is more than a temporary covering.

Flooding hazard may be expressed by one of three general flood frequency classes - none, rare, or common. Duration and time of year that the flooding occurs is given for those soils with common flood hazards. Not considered here, but nevertheless important, are velocity and depth of flood waters. The classes of flooding are defined as follows:

None — No reasonable possibility of flooding.

Rare — Flooding unlikely but possible under unusual weather conditions. No evidence of recent water deposited sediments on surface or within the pedon. Pedogenic horizons have developed within most soils. Flooding probability is so low that it imposes no more than slight or moderate soil limitation ratings for soil uses except those with high per-acre investments, such as residential developments.

Common — Flooding is likely under usual weather conditions. Most pedons show evidence of recent water deposited sediments or scouring. The probability of recurring floods is great enough to impose severe limitations on many uses of soils, such as sanitary facilities and community development. Restrictions on farming may be slight to severe depending on duration and season of flooding.

Where a finer breakdown of common flooding is made, the following classes under common flooding are used:

Occasional — Less often than once in 2 years on the average. Most pedons show evidence of past deposition or scouring. The probability of floods is not great enough to interfere seriously with farming operations although some crop damage is likely.

Frequent — More often than once in 2 years on the average. The pedon shows evidence of yearly deposition or scouring. In addition, debris or other recent flood water marks are easily observable on the ground, on trees, fences, or bridges. The probability of floods is great enough to restrict the choice of crops, cause severe crop damage, or prevent the production of crops.

Duration refers to the length of time that the soils are flooded. Only duration classes for common frequency classes are given. These classes are as follows:

Very brief — Less than 2 days. Soils have sufficient surface drainage so that flood waters run off, and damage, if any, to crops results mainly from scouring or sedimentation.

Brief — 2 to 7 days. Relatively permeable soils on level or depressional landscapes or soils with restricted permeability on nearly level landscapes. Most cultivated crops are severely affected by flooding; most pasture plants and tree species are slightly or moderately affected.

Long — 7 days to 1 month. Soils on nearly level or depressional landscapes with restricted surface drainage or restricted permeability, or both. Only water tolerant plants can survive.

Very Long — More than 1 month. Soils on nearly level or depressional landscapes with highly restricted surface drainage and restricted permeability. Only water tolerant plants survive.

The time of year that flooding normally occurs is expressed in months, for example, December-May.

The economic and social consequences of improper land use of flood prone areas are serious. Problems begin when structures are located in flood prone areas. The initial development encourages additional construction and the installation of streets and utilities. The capacity of the floodway may be reduced by these kinds of developments increasing the flood hazard. When flooding occurs, losses are not borne only by the property owner but by the community as well. The public is usually called upon to bear the coast of flood fighting, rehabilitation, and flood protection.

Dwellings, commercial buildings, and other high cost developments that are easily damaged by floods shouldn't be located on flood prone soils. Sanitary facilities such as septic tank filter fields, sewage lagoons, and sanitary landfills built on flood prone soils present a health hazard. Roads and streets built on flood prone soils are likely to be closed during floods and may require extensive maintenance or restoration after floods.

in agricultural areas the consequences of flooding are much less expensive, but nevertheless, may present a hazard to the production of crops. The frequency, duration, and time of year the flooding occurs influences whether trees, pasture, or crops can be grown.

Trees and pastures can withstand more flooding than crops. Certain short season crops, however, can be grown successfully if the growing season is relatively flood free.

High Water Table--A high water table is defined as a zone of saturation at the highest average depth during the wettest season. It persists in the soil for more than a few days and occurs within 80 inches of the soil surface.

Most water tables occur within the soil and are measured from the surface of the soil down to the free-water level. In swamps and marshes, however, the water table is above the surface of the soil much of the time and water table is measured from the surface of the water down to the soil surface.

Soils that have seasonal high water tables are classified according to depth to the water table, kind of water table, and time of year that the water table is highest.

The depth of the high water table from the soil surface is given in feet or half feet. The range in depth reflects the year-to-year variation in average highest depth. Depth to water table within the soil is recorded with the small number first, e.g., 2-3. Water table above the soil surface is recorded with a +, e.g., +2; if the water table varies such that the average highest depth can be above or below the surface, it is recorded as follows: +1-0.5, with the first number indicating 1 foot above the soil surface, and the second number 1/2 foot below the soil surface. Where a water table is below 6 feet or exists for less than one month, 6.0 is shown under depth.

Three kinds of seasonal high water tables are recognized within the soil: apparent, perched, and artesian.

Apparent Water Table - is the level at which water stands in a dug unlined borehole. It is influenced by the hydrostatic pressure of soil water and by pressure at greater depths penetrated by the borehole, water relations across impermeable layers, and other factors; in the absence of evidence that would permit greater specificity, therefore, the term apparent water table is used for the level at which water stands in an uncased borehole after adequate time of adjustment in the surrounding soil.

Perched Water Table - is one that exists in the soil above an unsaturated zone. A water table may be inferred to be perched on the basis of general knowledge of the water levels of an area, the landscape

position, the permeability of soil layers, and from other evidence. To prove that a water table is perched, it is necessary to observe the water level in cased wells placed above, in, and below the less permeable layer. If the water in the well above the less permeable layer is consistently higher than the other two, the water table is perched.

Artesian Water Table - is one that exists under hydrostatic head beneath an impermeable layer. When this impermeable layer is penetrated by a cased borehole, the water rises. The final level of the water in the cased borehole may then be characterized as an artesian water table.

Areas with water tables above the surface of the soil much of the time are characterized as marsh or swamp - marsh having herbaceous vegetation and swamps having woody vegetation.

The months that the water table normally persists at the average highest depth range is shown, for example, January through April.

A seasonal high water table is an important criterion in a number of engineering and biological uses of soils. Its depth and duration influences the use of soils for septic tank absorption fields, shallow excavations, sanitary landfills, dwellings, and local roads and streets, and ease of excavation for roadfill and topsoil.

The water table also influences the growth of crops - a water table that is near the surface during the growing season is detrimental to most plants. Growing plants, however, tend to lower the water table through transpiration. A change in land use may drastically change the wetness of an area. For example, a change from trees to soybeans changes the transpiration rate and may cause a wetter soil condition. Changing land use from cropland, pasture, or forest to urban areas with streets and houses covering a much larger area not only decreases the transpiration by vegetation but also causes increased runoff. A wetter soil may result.

Subsidence--This refers to the lowering of the level of the soil surface. When water is removed and the water table is lowered in organic soils and some mineral soils with low strength in tidal marshes, the soil will subside. Initially, or in the first few years, the subsidence is most pronounced or greatest. After initial subsidence, organic soils in Florida subside or oxidize at the rate of about 1 inch per year. Total subsidence is estimated in inches.

Corrosivity, Steel--This refers to the potential for corrosion of uncoated steel pipe buried in the soil. The soils are rated as follows: LOW (slightly corrosive), MODERATE (moderately corrosive), and HIGH (severely corrosive). Corrosion of uncoated steel pipe is a physical-biochemical process converting iron into its ions. Soil moisture is needed to form

solutions with soluble salts before the process can operate. The corrosivity is estimated by electrical resistivity or resistance to flow of current, total acidity, soil drainage, and soil texture.

Corrosivity, Concrete--This refers to the potential for deterioration of concrete placed in soil materials. Deterioration is caused by a chemical reaction between the concrete (a base) and the soil solution (potential weak acid). Special cements and methods of manufacturing may be used to reduce rate of deterioration in soils of high corrosivity. Some of the soil properties that affect the rate of deterioration are soil texture and acidity, the amount of sodium or magnesium present in the soil singly or in combination, and amount of sodium chloride in the soil. The presence of sodium chloride in the soil indicates the presence of sea water. Sea water contains sulphates which are one of the principal corrosive agents.

EXPLANATION OF LIMITATIONS AND RESTRICTIVE FEATURES USED IN RATING SOILS FOR SANITARY FACILITIES, COMMUNITY DEVELOPMENT, SOURCE MATERIAL, *WATER MANAGEMENT, AND RECREATION

Rating Soils for Selected Uses

Soils are rated for the uses expected to be important or potentially important to users of soil survey information. Ratings for proposed uses are given in terms of limitations and restrictive features, suitability and restrictive features, or only restrictive features. Only the most restrictive features are listed, therefore, a soil rated severe gives those soil features that cause the soil to be rated severe. There may be other features that need to be treated to overcome soil limitations for a specific purpose. The definition of the ratings are as follows:

Limitation Ratings

Soils are rated in their "natural" state, that is, no modification of the soil site or material is made. Only the most restrictive features are listed.

Slight is the rating given soils that have properties favorable for the use. The degree of limitation is minor and can be overcome easily. Good performance and low maintenance can be expected.

Moderate is the rating given soils that have properties moderately favorable for the use. This degree of limitation can be overcome or modified by special planning, design, or maintenance. During some part of the year, the expected performance of the structure or other planned use is somewhat less desirable than for soils rated slight. Some soils rated moderate require treatment such as artificial drainage, control of runoff to reduce erosion, extended septic tank absorption fields, extra excavation, or some modification of certain features through manipulation of the soil. For these soils, modification is needed for those construction plans generally used for soils of slight limitation. Modification may include specially designed foundations, extra reinforcement of structures, sump pumps, and the like.

Severe is the rating given soils that have one or more properties unfavorable for the rated use, such as steep slopes, bedrock near the surface, flooding, high shrink-swell potential, a seasonal high water table, or low strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance. Some of these soils, however, can be improved by reducing or removing the soil feature that limits use, but in most situations, it is difficult and costly to alter the soil or to design a structure so as to compensate for a severe degree of limitation.

THE INTERPRETATIONS WILL NOT ELIMINATE THE NEED FOR ON-SITE STUDY, TESTING AND PLANNING OF SPECIFIC SITES FOR THE DESIGN AND CONSTRUCTION FOR SPECIFIC USES. The interpretations can be used as a guide to planning more detailed investigations and for avoiding undesirable sites for an intended use. By using the soil map and interpretations, it is possible to select sites that have the least limitations for an intended use.

Many soils that have a high water table have severe limitations in their natural condition. These same soils, when drained artificially, may only have a slight limitation. Modern equipment and knowledge make it possible to overcome most of the limitations of soils for many urban and recreational uses. The degree of the limitation and the location of the soil will determine the practicability of developing the soil for the intended use. No consideration was given in these interpretations to the size and shape of soil areas, nor to the pattern they form with other soils on the landscape. For example, some very desirable soil areas are too small in size or too irregular in shape, or their concurrence with less desirable soils forms a pattern too complex to be utilized for the intended use. Although not considered in the interpretations, these items should influence the final selection of a site.

In rating soils for nonfarm uses, it is important to remember that engineers and others can modify soil features or can design or adjust the plans for a structure to compensate for most degrees of limitations. Most of these practices, however, are costly. The owner must be willing to live with a few limitations, providing the use does not violate community codes or regulations. The final decision in selecting a site for a particular use is a personal one and generally involves weighing the costs for site preparation and maintenance.

Suitability Ratings

Soils are rated in their "natural" state, that is, no modification of the soil site or materials is made. A rating of good means the soils have properties favorable for the use. Good performance and low maintenance can be expected.

A rating of fair means the soil is moderately favorable for the use. One or more soil properties make these soils less desirable than those rated good.

A rating of poor means the soil has one or more properties unfavorable for the use. Overcoming the unfavorable property requires special design, extra maintenance, or costly alteration.

The limitations or restrictive features and the features affecting a particular use are shown on the tables through the use of "Key Phrases." A list of the key phrases with explanation or definition follows:

KEY PHRASE	EXPLANATION
AREA RECLAIM	Borrow areas are difficult to reclaim, and revegetation and erosion control on these areas are extremely difficult.
CEMENTED PAN	Cemented pan too close to surface.
CUTBANKS CAVE	Walls of cuts are not stable. The soil sloughs easily.
DEEP TO WATER	Deep to permanent water table during dry season.
DEPTH TO ROCK	Bedrock is so near the surface that it affects specified use of the soil.
DROUGHTY	Soil holds too little water for plants during dry periods.
DUSTY	Soil particles detach easily and cause dust.
ERODES EASILY	Water erodes soil easily.
EXCESS FINES	The soil contains too much silt and clay for use as gravel or sand in construction.
EXCESS HUMUS	Too much organic matter.
EXCESS LIME	The amount of carbonates in the soil is so high that it restricts the growth of most plants.
EXCESS SALT	The amount of soluble salt in the soil is so high that it restricts the growth of most plants.
FAST INTAKE	Water infiltrates rapidly into the soil.
FAVORABLE*	Features of the soil are favorable for the intended use.
FLOODS	Soil flooded by moving water from stream overflow, runoff, or high tides.
FRAGILE	Soil easily damaged by use of disturbance.
HARD TO PACK	Difficult to compact.
LARGE STONES	Rock fragments greater than 3 inches across affect the specified use.
LOW STRENGTH	The soil has inadequate strength to support loads.
NO WATER	Too deep to ground water.
PERCS SLOWLY	Water moves through the soil slowly, affecting the specified use.
PIPING	The soil is susceptible to the formation of tunnels or pipelike cavities by moving water.
PONDING	Soil in closed depressions inundated by standing water that is removed only by percolation or evapotranspiration.
ROOTING DEPTHS	A layer that greatly restricts the downward rooting of plants occurs at a shallow depth.
SALTY WATER	Water too salty for livestock consumption.
SEEPAGE	Water moves through the soil so quickly that it affects the specified use.
SHRINK-SWELL	The soil expands on wetting and shrinks on drying, which may cause damage to roads, dams, building foundations, or other structures.
SLIPPAGE	Soil mass is susceptible to movement downslope when loaded, excavated or wet.

SLOPE	Slope too great.
SLOW INTAKE	Water infiltrates slowly into the soil.
SLOW REFILL	Ponds fill slowly because the permeability of the soil is restricted.
SMALL STONES	Rock fragments that are 3 inches or less across may affect the specified use.
SOIL BLOWING	Soil easily moved and deposited by wind.
SUBSIDES	Settlement of organic soils or of soils containing semifluid layers.
THIN LAYER	Suitable soil material is not thick enough for use as borrow material or topsoil.
TOO ACID	The soil is so acid that growth of plants is restricted.
TOO CLAYEY	Soil slippery and sticky when wet and slow to dry.
TOO SANDY	Soil soft and loose; droughty and low in fertility.
WETNESS	Soil wet during period of use.

*Used only under "features affecting" in Water Management where other entries were not appropriate.

TABLE L - SANITARY FACILITIES 1/

The nature of the soil is important in selecting sites for septic tank absorption fields, sewage lagoons, and sanitary landfills, and in identifying limiting soil properties and site features to be considered in planning, design, and installation of these facilities.

Soil limitations ratings of slight, moderate, or severe are given for septic tank absorption fields, sewage lagoons and trench and area type sanitary landfills. Soil suitability ratings of good, fair, and poor are given for daily cover for landfill.

(a) Septic tank absorption fields are subsurface systems of tile or perforated pipe that distribute effluent from a septic tank into the natural soil. The centerline depth of the tile is assumed to be at a depth of 24 inches. Only the soil between depths of 24 and 72 inches is considered in making the ratings. The soil properties and site features considered are those that affect the absorption of the effluent, those that affect the construction of the system, and those that may affect public health.

Properties and features that affect the absorption of the effluent are permeability, depth to seasonal high water table, depth to bedrock, and a shallow depth to bedrock, ice, or cemented pan interfere with installations. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas. Also soil erosion and soil slippage are hazards where absorption fields are installed in sloping soils.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, and as a result ground water supplies in the area may be contaminated.

Percolation tests are used by some regulatory agencies to evaluate the soil's suitability for septic tank absorption fields. These tests should be performed during the season when the water table is highest and the soil is at minimum absorptive capacity. The percolation rates do not correspond to the permeability rates because they are measured by different methods. Experience indicates that soils having percolation rates (1) faster than 43 minutes per inch function satisfactorily, (2) between 45 and 60 minutes per inch have moderate limitations, and (3) slower than 60 minutes per inch have severe limitations (USDHEW 1969).

In many of the soils that have moderate or severe limitations for septic tank absorption fields, it may be possible to install special systems that lower the seasonal water table or to increase the size of the absorption fields so that satisfactory performance is achieved (Bouma, 1974). However, such considerations are not considered in this report.

1/Ratings based on NATIONAL SOILS HANDBOOK, Part II, Section 403, 3-78.

(b) Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons have a nearly level floor surrounded by cut slopes or embankments of compacted, relatively impervious soil material. Aerobic lagoons generally are designed so that depth of the sewage is 2 to 5 feet. Relatively impervious soil for the lagoon floor and sides is desirable to minimize seepage and contamination of local ground water.

Soil permeability is a critical property in evaluating a soil for sewage lagoons. Most porous soils will eventually seal when being used as a sewage lagoon, however, until they do, the hazard of pollution is great and it is difficult to maintain the constant water depth required for proper operation. Soils with a permeability exceeding 2 inches per hour are generally too porous for proper operation of sewage lagoons and may cause contamination of shallow wells. Fractured bedrock within 40 inches may create a pollution hazard. Bedrock and cemented pans create construction problems.

The slope limits are based on the specification that the effluent be 2 to 5 feet deep. If shallower than this, weeds grow, if deeper, it is more difficult to maintain an aerobic environment. Slope must be gentle enough and the soil material thick enough over bedrock or cemented pan to make smoothing for uniformity of lagoon depth practical.

If floodwater overtops the lagoon, it interferes with the functioning of the lagoon and carries away polluting sewage before sufficient decomposition has taken place. Ordinarily, therefore, soils susceptible to flooding have a severe limitation for sewage lagoons. If, however, flood waters are slow flooding and are rarely if ever more than 5 feet deep--not deep enough to overtop the lagoon embankment--the limitation rating is not severe because of susceptibility to flooding.

Soil containing large amounts of organic matter are unsuitable for the floor of the lagoon. The organic matter promotes anaerobic rather than aerobic environment and is detrimental to the proper functioning of the lagoon.

Depth to water table is important if it influences the water level in the lagoon. If it does, then a pollution hazard also exists. Depth to water table is disregarded if the lagoon floor has slowly permeable soil material at least 4 feet thick. Soils that contain rock fragments are undesirable sites because the fragments interfere with the manipulation and compaction needed to prepare the lagoon floor.

(c) Sanitary landfill (trench) is a method of disposing of solid waste by placing refuse in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil that is excavated from the trench. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill.

Ratings are based on properties to a depth normally observed during soil mapping. However, because trenches may be as deep as 15 feet or more, geologic investigations are needed to determine the potential for pollution of ground water as well as examination of stratification, rock formations, and geologic conditions that might lead to the conducting of leachates to aquifers, wells, water courses, and other water sources. The presence of hard nonripple bedrock, creviced bedrock, or highly permeable strata in or immediately underlying the proposed trench bottom is undesirable from the standpoints of excavation and potential pollution of underground water.

Properties that influence risk of pollution, ease of excavation, trafficability, and revegetation are major considerations. Soils that flood or have a water table within the depth of excavation present a potential pollution hazard and cause difficulty in excavating.

Soil slope is an important consideration because it affects the work involved in road construction, the performance of the roads and the control of surface water around the landfill. Soil slope may also cause difficulty in construction of the trenches where the trench bottoms must be kept level and oriented to follow the contour.

Soil slippage may be a problem on certain sloping soils.

The ease with which the trench is dug and with which a soil can be used as daily and final cover is based largely on texture and consistence of the soil. The texture and consistence of a soil determines the degrees of workability of the soil both when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and to place in a uniformly thick cover over a layer of refuse.

The uppermost part of the final cover should be soil material that is favorable for the growth of plants. It should not contain excess sodium or salt and should not be too acid. In comparison with other

horizons, the A horizon in most soils has the best workability and highest content of organic matter. Thus, for a trench-type landfill operation it may be desirable to stockpile the surface layer for use in final blanketing of the fill.

(d) Sanitary landfill (area) is a method of disposing of solid waste by placing refuse in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil that is imported from a source away from the site. A final cover of soil at least 2 feet thick is placed over the landfill when it is completed. Properties that influence traffic ability and risk of pollution are the only considerations for area sanitary landfills.

Flooding is a serious problem because of the risk of washouts and pollution downstream and the difficulty of moving trucks in and out of flooded areas.

Permeability of the soil is an important consideration. If permeability is too rapid, or if fractured bedrock or fractured cemented pan are close to the surface, the risk of the leachate contaminating water supplies is great. A high water table may also transmit pollutants to water supplies and is likely to restrict truck movement during the wet parts of the year.

Slope is a consideration because of the extra grading required to maintain roads on sloping soils. Furthermore, leachate may flow along the soil surface on sloping soils and cause difficult seepage problems in completed fills.

Soil slippage may be a problem on certain sloping soils.

(e) Daily cover for landfill is the soil material that is applied daily to compacted solid waste in an area type sanitary landfill. The cover material is obtained offsite, transported, and spread on the area. The required soil characteristics relative to both daily and final cover material are nearly enough alike for one rating to serve.

Suitability of a soil for use as cover is based on properties that reflect workability, ease of digging, and moving and spreading the material over the refuse daily during both wet and dry periods. Soils that are loamy or silty and free of stones are better than other soils. Clayey soils may be sticky and difficult to spread; sandy soils may be subject to soil blowing.

The soil must be thick enough over bedrock, cemented pan or water table so that material can be removed efficiently and yet leave a borrow area that can be revegetated. Some damage to the borrow area is expected, but if revegetation and erosion could be serious problems, then the soil is rated severe.

Slope affects the ease of excavation and moving of the cover material. Slope also may affect the final configuration of the borrow area and hence runoff, erosion, and reclamation.

In addition to these features, the soils selected for daily cover of landfill should be suitable for growing plants. They should not contain significant amounts of substances toxic to plants such as a high content of sodium or salts.

Table M - BUILDING SITE DEVELOPMENT

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, and after construction, performance, and maintenance.

Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

(a) Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewerlines, telephone and power transmission lines, basements, open ditches, grave sites, and the like. The excavations are most commonly made by trenching machines or backhoes.

The ratings are based on the soil properties that influence ease of digging and the resistance to sloughing. Depth and hardness of bedrock or cemented pan, the bulk density of the soil and the amount of large stones influences the ease of digging, filling, and compacting. Depth to the seasonal high water table and flooding may restrict the time that the excavations can be made. Slope influences the ease of using digging machines. Soil texture and depth to water table influence the resistance to sloughing. Soil slippage may be a problem on certain sloping soils.

(b) Dwellings without basements are single-family houses of three stories or less without basements. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet.

The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs. The properties affecting soil strength and settlement are presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soils. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of coarse fragments. Soil slippage may be a problem on certain sloping soils.

(c) Dwellings with basements are single-family houses of three stories or less with basements. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings are based on properties affecting soil strength and settlement under load and those that affect excavation and

construction costs. The properties affecting soil strength and settlement are the presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soil. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of coarse fragments. Soil slippage may be a problem on certain sloping soils.

(d) Small commercial buildings are less than 3 stories without basements. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet.

The ratings are based on properties affecting soil strength and the settlement under a load and those that affect excavation and construction costs. The properties affecting soil strength and settlement are presence of a high water table and flooding, and the shrink-swell behavior and compressibility of the soil. Compressibility is inferred from the Unified classification. Properties influencing the ease and amount of excavation are flooding, high water table, slope, depth to bedrock or cemented pan, and the amount of rock fragments. Soil slippage may be a problem on certain sloping soils.

(e) Local Roads and Streets -- Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing--commonly of asphalt or concrete--and that are expected to carry automobile traffic all year. The roads and streets consist of (1) the underlying local soil material, whether cut or fill, that is called "the subgrade," (2) the base material, lime-stabilized soil, soil-cement stabilized soil, gravel or crushed road, and (3) the actual road surface or street pavement that is either flexible (asphalt), rigid (concrete), or gravel with binder in it. These roads and streets are graded to shed water and conventional drainage measures are provided. With probable exception of the hard surface, the roads and streets are built mainly from the soil at hand.

The properties that affect local roads and streets are those that influence the ease of excavation and grading, and traffic supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or cemented pan, depth to water table, flooding, the amount of large stones, and slope. The properties that affect traffic supporting capacity are soil strength as inferred from ASSHTO group index and the Unified classification, shrink-swell behavior, potential frost action, and depth to high water table. Soil slippage may be a problem on certain sloping soils.

(f) Lawns and Landscaping The soils are rated for their use in establishing and maintaining turf for lawns, and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criteria for rating.

The properties considered are those that affect plant growth and trafficability after establishing vegetation. The properties that affect plant growth are the content of salt, sodium and sulfidic materials, soil reaction, depth to water table, depth to bedrock or cemented pan, and the available water capacity of the upper 40 inches of soil. The properties that affect trafficability after vegetation is established are flooding, wetness, slope, stoniness, and the amount of clay, sand or organic matter in the surface layer.

Table N - CONSTRUCTION MATERIALS

Suitability ratings of good, fair, or poor are given for soils used as a source of roadfill and topsoil. Ratings of probable and improbable are given for sand and gravel.

A rating of probable means that on the basis of the available evidence, the source material is likely to occur in or below the soil. A rating of improbable means that the source material is unlikely to occur within or below the soil. This rating does not consider the quality of the source material because quality depends on how the source material will be used.

(a) Roadfill--Roadfill consists of soil material that is excavated from its original position and used in road embankments elsewhere. The evaluations for roadfill are for low embankments generally less than 6 feet and are less exacting in design than high embankments such as used in superhighways. The rating is given for the whole soil, from the surface to a depth of about 5 feet, based on the assumption that soil horizons will be mixed in loading, dumping, and spreading. Soils are rated as to the amount of material available for excavation, the ease of excavation, and how well the material performs after it is in place.

Soil properties that affect the amount of material available for excavation are thickness of suitable material above bedrock or other material that is not as suitable. The percent of coarse fraction greater than 3 inches, depth to high water table and slope are properties that influence the ease of excavation. How well the soil performs in place is indicated by AASHTO classification and group index and the shrink-swell potential. Some damage to the borrow area is expected, but if revegetation and erosion control could become serious problems, then the soil is rated severe.

(b) Sand--Sand as a construction material is usually defined as the size of particles ranging from 0.74 mm (sieve #200) to 4.76 mm (sieve #4) in diameter. Sand is used in great quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the sand for specific purposes is not evaluated.

The properties used to evaluate the soils as a probable source for sand are the grain size as indicated by the Unified Soil Classification, the thickness of the sand layer, and the amount of rock fragments in the soil material.

If the lowest layer of the soil contains sand, the soil is rated as a probable source regardless of thickness. The assumption is that the sand layer below the depth of observation exceeds the minimum thickness.

(c) Gravel--Gravel as a construction material is defined as the size of particles ranging from 4.76 mm (sieve #4) to 76 mm (3 inches) in diameter. Gravel is used in great quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the gravel for specific purposes is not evaluated. Most soils in Florida lack gravel. Some soils, however, are underlain by limestone bedrock that is a good source of material to crush for aggregate.

The properties used to evaluate the soil as a probable source for gravel are grain size as indicated by the Unified Soil Classification, the thickness of the gravel layer and the amount of rock fragments in the soil material. If the lowest layer of the soil contains gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the gravel layer below the depth of observation exceeds the minimum thickness.

(d) Topsoil--The term "topsoil" has several meanings, but as used here, the term describes soil material used to cover an area so as to improve soil conditions for establishment and maintenance of adapted vegetation.

Generally, the organic rich upper part of the soil is most desirable, however, material excavated from deeper layers is also used. In this rating, the upper 40 inches of soil material is evaluated for its use as topsoil. In the borrow area, the material below 40 inches is evaluated for its suitability to grow vegetation after the upper 40 inches is removed.

The soil properties that are used to rate the soil as topsoil are those that influence plant growth, those that influence the ease of excavation, loading, and spreading; and those which influence the reclamation of the borrow area.

The physical and chemical soil properties that influence plant growth are the presence of toxic substances, soil reaction, and those properties which are inferred from the soil texture such as available water capacity and fertility. The properties that influence the ease of excavation, loading, and spreading are the amounts of rock fragments, slope, depth to the water table, soil texture, and thickness of suitable material. The properties that influence the reclamation of the borrow area are slope, depth to water table, amount of rock fragments, depth to rock, and the presence of toxic material.

Table P - WATER MANAGEMENT

Interpretations of soils for water management are given as limitations for pond reservoir areas, embankments, dikes and levees, and excavated ponds

(aquifer-fed), and as restrictive features that affect drainage, irrigation, terraces and diversions, and grass waterways. If there are no restrictive features the soil is shown as "favorable."

(a) Pond Reservoir Area is the area that holds water behind a dam or embankment. Soils best suited to this use have a low seepage potential which is determined by permeability and depth to fractured or permeable bedrock, cemented pan, or other permeable material. The soil is rated on its properties in the upper 60 inches as a natural barrier against seepage into deeper layers without regard to cutoff trenches or other features that may be installed under the pond embankment. Excessive slopes will seriously reduce the storage capacity of the reservoir area.

(b) Embankments, dikes, and levees are raised structures of soil material constructed to impound water or protect land against overflow. They are generally less than 20 feet high, constructed of "homogenous" soil material (without a core zone) and compacted to medium density. Embankments having zoned construction (core and shell) are not considered.

Ratings are made for soil as source material for embankment fills. The rating is given for whole soil, from the surface to a depth of about 5 feet, based on the assumption that soil horizons will be mixed in loading, dumping, and spreading. The ratings do not indicate the suitability of the natural soil for supporting the embankment. Soil properties to depths greater than the embankment height will have an effect on the embankment performance and safety. Generally, deeper onsite geologic investigations must be made to determine these important properties. Low density silts and clays in the supporting foundations usually have excess settlement and low strength.

Embankments, dikes, and levees require soil material that is resistant to seepage, piping, and erosion, and that has favorable compaction characteristics. Organic soils are not suitable because of high compression, low strength, and unpredictable permeability. When compacting with tamping rollers (sheepsfoot) or pneumatic rollers, stones over 6 inches in size must be removed, causing restrictions for stony soils. If a water table is present, the depth of usable material and the trafficability are affected.

The content of sodium and salts affects the capability for growing vegetation on embankment surfaces. These properties may also indicate dispersive soils that are highly erosive and susceptible to piping.

(c) Excavated Ponds (aquifer-fed)--An aquifer-fed excavated pond is a body of water created by excavating a pit or dugout into a ground water aquifer. Excluded are ponds that are fed by surface runoff and embankment ponds that impound water 3 feet or more above the original surface.

The soil properties that affect aquifer-fed ponds are depth to a permanent water table, permeability of the aquifer, and quality of

water as determined by inference from the salinity of the soil. Large stones are also considered because of their effect on ease of excavation.

(d) Drainage is the process of removing excess surface and subsurface water from agricultural land. How easily and effectively a soil is drained depends on the depth of the water table or ponding, soil permeability, depth to bedrock or cemented pan, flooding, subsidence of organic layers, and slope. The productivity of the soil after drainage is dependent on presence of toxic substances in the root zone, such as salts, sodium, sulfur, or extreme acidity.

Properties that affect grading, excavation, and stability of trench or ditch bands are depth to bedrock or cemented pan, large stones, slope and stability against caving.

Availability of drainage outlets is a feature that must be considered in design, but is not considered in this report.

(e) Irrigation is the controlled application of water to supplement rainfall for supporting plant growth. Soil features are listed that affect design, layout, construction, management or performance of an irrigation system. Those features important in design and management of most irrigation systems are wetness or ponding and the need for drainage, flooding, available water capacity, intake rate, permeability, susceptibility to wind or water erosion, and slope. Soil features that influence construction are large stones and depth to bedrock or cemented pan. The features that affect performance of the system are rooting depth, amount of salts or sodium, and soil acidity.

(f) Terraces and Diversions are embankments or a combination of an embankment and channel constructed across a slope to control erosion by diverting or storing runoff instead of permitting it to flow uninterrupted down the slope. Soil features are listed that affect the construction of terraces and diversions and that may cause problems after construction of terraces and diversions. Soil features that influence construction are slope, large stones, depth to bedrock or cemented pan, and wetness. Soil features that may cause problems after construction are restricted rooting depth, high susceptibility to wind or water erosion, and restricted permeability to water and air.

(g) Grassed waterways are natural or constructed channels, usually broad and shallow, covered with erosion-resistant grasses, used to conduct surface water to outlets at a nonerosive velocity. Soil features are listed that affect the construction of grassed waterways and the growth and maintenance of grass after construction. Soil features that influence the construction of grassed waterways are large stones, wetness, slope, and depth to bedrock or cemented pan. The soil features affecting the growth of grass after construction are susceptibility to wind or water erosion, available water capacity, rooting depth, presence of toxic substances such as salts or sodium and the permeability of water and air.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY

(Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available)

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
4---------- Anclote	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress---------	75	2	
							Baldcypress---------	---	--	
							Blackgum----------	---	--	
							Cabbage palm--------	---	--	
							Carolina ash--------	---	--	
							Loblollybay gordonia	---	--	
							Red maple----------	---	--	
							Sweetbay----------	---	--	
							Pond pine----------	---	--	
5**:										
Anclote----------	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress---------	75	2	
							Baldcypress---------	---	--	
							Blackgum----------	---	--	
							Cabbage palm--------	---	--	
							Carolina ash--------	---	--	
							Loblollybay gordonia	---	--	
							Red maple----------	---	--	
							Sweetbay----------	---	--	
							Pond pine----------	---	--	
Myakka----------	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress---------	75	2	
							Baldcypress---------	---	--	
							Blackgum----------	---	--	
							Sweetbay----------	---	--	
							Loblollybay gordonia	---	--	
							Red maple----------	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
5**:										
Felda	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	2	
							Baldcypress	---	--	
							Blackgum	---	--	
							Cabbage palm	---	--	
							Pond pine	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
6**:										
Anclote	6W	Slight	Severe	Severe	Moderate	Severe	Baldcypress	100	6	
							Sweetgum	---	--	
							Water oak	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
							Laurel oak	---	--	
							Cypress	---	--	
							Pond pine	---	--	
Delray	11W	Slight	Severe	Severe	Slight	Moderate	Slash pine	90	11	Slash pine, South Florida slash pine.
							Sweetgum	90	7	
							South Florida slash pine	55	6	
Hontoon	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress	100	6	
							Blackgum	---	--	
							White ash	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
							Cypress	---	--	
							Pond pine	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
7 Apopka	10S	Slight	Moderate	Moderate	Slight	Slight	Slash pine	80	10	Slash pine, loblolly pine.
							Loblolly pine	80	8	
							Longleaf pine	70	6	
							Turkey oak	---	--	
							Bluejack oak	---	--	
							Post oak	---	--	
							Live oak	---	--	
8**:										
Apopka	10S	Slight	Moderate	Moderate	Slight	Slight	Slash pine	80	10	Slash pine, loblolly pine.
							Loblolly pine	80	8	
							Longleaf pine	70	6	
							Turkey oak	---	--	
							Bluejack oak	---	--	
							Post oak	---	--	
							Live oak	---	--	
Urban land.										
9 Apopka	10S	Slight	Moderate	Moderate	Slight	Slight	Slash pine	80	10	Slash pine, loblolly pine.
							Loblolly pine	80	8	
							Longleaf pine	70	6	
							Turkey oak	---	--	
							Bluejack oak	---	--	
							Post oak	---	--	
							Live oak	---	--	
10 Astatula	3S	Slight	Severe	Moderate	Slight	Slight	Sand pine	60	3	Sand pine.
							Turkey oak	---	--	
							Bluejack oak	---	--	
							Blackjack oak	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
11**:										
Brighton	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress	100	6	
							Blackgum	---	--	
							Cypress	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
							White ash	---	--	
							Pond pine	---	--	
Brighton	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress	100	6	
							Blackgum	---	--	
							Cypress	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
							White ash	---	--	
							Pond pine	---	--	
12**:										
Bluff	11W	Slight	Severe	Severe	Slight	Severe	Slash pine	90	11	
							Loblolly pine	90	9	
							South Florida slash pine	55	6	
							Cabbage palm	---	--	
							Baldcypress	100	6	
							Laurel oak	---	--	
							Sweetgum	---	--	
							Water oak	---	--	
Manatee	11W	Slight	Severe	Severe	Slight	Moderate	Slash pine	90	11	Slash pine, South Florida slash pine.
							South Florida slash pine	68	12	
13 Candler	8S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	70	8	Sand pine.
							South Florida slash pine	35	--	
							Longleaf pine	60	4	
							Sand pine	75	4	
							Turkey oak	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
14**:										
Candler	8S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	70	8	Sand pine.
							South Florida slash pine	35	--	
							Longleaf pine	60	4	
							Sand pine	75	4	
							Turkey oak	---	--	
Urban land.										
15 Candler	8S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	70	8	Sand pine.
							South Florida slash pine	35	--	
							Longleaf pine	60	4	
							Sand pine	75	4	
							Turkey oak	---	--	
16**:										
Candler	8S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	70	8	Sand pine.
							South Florida slash pine	35	--	
							Longleaf pine	60	4	
							Sand pine	75	4	
							Turkey oak	---	--	
Urban land.										
17 Candler	8R	Moderate	Moderate	Moderate	Slight	Moderate	Slash pine	70	8	Sand pine.
							South Florida slash pine	35	--	
							Longleaf pine	60	4	
							Sand pine	75	4	
							Turkey oak	---	--	
18 Cassia	8S	Slight	Moderate	Severe	Slight	Moderate	Slash pine	70	8	Sand pine.
							Longleaf pine	60	4	
							South Florida slash pine	35	3	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
19---------- Ellzey	7W	Slight	Moderate	Severe	Slight	Moderate	Longleaf pine--------	80	7	Slash pine, South Florida slash pine.
							Slash pine----------	65	8	
							South Florida slash pine ----------	45	4	
20---------- Emeralda	11W	Slight	Severe	Moderate	Moderate	Severe	Slash pine----------	90	11	Slash pine, loblolly pine.
							Longleaf pine--------	80	7	
							Live oak----------	---	--	
							Water oak----------	---	--	
							Laurel oak----------	---	--	
							Sweetgum----------	---	--	
							Red maple----------	---	--	
21---------- Eureka	11W	Slight	Severe	Moderate	Moderate	Moderate	Slash pine----------	90	11	Slash pine, loblolly pine.
							Loblolly pine--------	90	9	
							Longleaf pine--------	80	7	
							Sweetbay----------	---	--	
							Sweetgum----------	---	--	
							Magnolia----------	---	--	
							Water oak----------	---	--	
22**:										
Everglades--------	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress---------	100	6	
							Blackgum----------	---	--	
							Pondcypress---------	---	--	
							Loblollybay gordonia	---	--	
							Red maple----------	---	--	
							Sweetbay----------	---	--	
							Pond pine----------	---	--	
Everglades--------	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress---------	100	6	
							Blackgum----------	---	--	
							Pondcypress---------	---	--	
							Loblollybay gordonia	---	--	
							Red maple----------	---	--	
							Sweetbay----------	---	--	
							Pond pine----------	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
23---------- Felda	10W	Slight	Moderate	Severe	Slight	Moderate	Slash pine----------	80	10	Slash pine, South Florida slash pine.
							Longleaf pine-------	65	5	
							South Florida slash pine ----------	45	--	
24---------- Fellowship	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress---------	75	2	
							Baldcypress---------	---	--	
							Blackgum----------	---	--	
25---------- Immokalee	8W	Slight	Moderate	Moderate	Moderate	Moderate	Slash pine----------	70	8	Slash pine, South Florida slash pine.
							Longleaf pine-------	65	5	
							South Florida slash pine ----------	35	3	
26, 27---------- Kendrick	11S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine----------	90	11	Slash pine, loblolly pine.
							Loblolly pine-------	90	9	
							Longleaf pine-------	75	6	
							Turkey oak----------	---	--	
							Hickory----------	---	--	
							Magnolia----------	---	--	
28---------- Lake	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine----------	80	10	Slash pine.
							Longleaf pine-------	65	5	
							Blackjack oak-------	---	--	
							Bluejack oak--------	---	--	
							Turkey oak----------	---	--	
29**:										
Lake----------	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine----------	80	10	Slash pine.
							Longleaf pine-------	65	5	
							Blackjack oak-------	---	--	
							Bluejack oak--------	---	--	
							Turkey oak----------	---	--	
Urban land.										

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
30 Lake	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine.
							Longleaf pine	65	5	
							Blackjack oak	---	--	
							Bluejack oak	---	--	
							Turkey oak	---	--	
31 Lake	10S	Moderate	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine.
							Longleaf pine	65	5	
							Blackjack oak	---	--	
							Bluejack oak	---	--	
							Turkey oak	---	--	
32 Lochloosa	11A	Slight	Slight	Slight	Slight	Slight	Slash pine	90	11	Slash pine, loblolly pine.
							Loblolly pine	90	9	
							Dogwood	---	--	
							Hickory	---	--	
							Live oak	---	--	
							Laurel oak	---	--	
							Water oak	---	--	
							Magnolia	---	--	
							Sweetgum	---	--	
							Red maple	---	--	
33 Manatee	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	2	
							Baldcypress	---	--	
							Blackgum	---	--	
							Cabbage palm	---	--	
							Pond pine	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
34 Martel	2W	Slight	Severe	Severe	Slight	Moderate	Pond pine	90	--	Pond pine.
							Sweetgum	95	8	
							Water tupelo	---	--	
							Baldcypress	---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
35 Myakka	8W	Slight	Moderate	Moderate	Moderate	Moderate	Slash pine	70	8	Slash pine, South Florida slash pine, longleaf pine.
							Longleaf pine	60	4	
							South Florida slash pine	35	3	
							Live oak	---	--	
							Water oak	---	--	
36**:										
Myakka	8W	Slight	Moderate	Moderate	Moderate	Moderate	Slash pine	70	8	Slash pine, South Florida slash pine, longleaf pine.
							Longleaf pine	60	4	
							South Florida slash pine	35	3	
							Live oak	---	--	
							Water oak	---	--	
Placid	11W	Slight	Severe	Severe	Slight	Severe	Slash pine	90	11	Slash pine, South Florida slash pine.
							South Florida slash pine	55	6	
Myakka	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	2	
							Baldcypress	---	--	
							Blackgum	---	--	
							Sweetbay	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
37**:										
Ocoee	6W	Slight	Severe	Severe	Severe	Severe		---	--	
Ocoee	---	--------	--------	--------	--------	--------		---	--	
38**:										
Oklawaha	6W	Slight	Severe	Severe	Severe	Severe		---	--	
Oklawaha	---	--------	--------	--------	--------	--------		---	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
39---------- Ona	10W	Slight	Moderate	Moderate	Slight	Moderate	Slash pine----------	80	10	Slash pine, South Florida slash pine.
							Longleaf pine-------	70	6	
							South Florida slash pine ----------	45	4	
40---------- Orlando	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine----------	80	10	Slash pine, South Florida slash pine.
							Longleaf pine-------	65	5	
							South Florida slash pine ----------	45	--	
							Laurel oak----------	---	--	
							Live oak----------	---	--	
							Turkey oak----------	---	--	
							Dogwood----------	---	--	
							Hickory----------	---	--	
							Sweetbay----------	---	--	
41---------- Orsino	8S	Slight	Moderate	Severe	Slight	Moderate	Slash pine----------	70	8	Slash pine, sand pine, South Florida slash pine.
							Longleaf pine-------	60	4	
							Sand pine----------	70	4	
							South Florida slash pine ----------	35	3	
							Sand live oak-------	---	--	
							Turkey oak----------	---	--	
42---------- Paola	2S	Slight	Moderate	Severe	Slight	Slight	Sand pine----------	50	2	Sand pine.
							Sand live oak-------	---	--	
43**:										
Paola----------	2S	Slight	Moderate	Severe	Slight	Slight	Sand pine----------	50	2	Sand pine.
							Sand live oak-------	---	--	
Urban land.										
44---------- Paola	2S	Slight	Moderate	Severe	Slight	Slight	Sand pine----------	50	2	Sand pine.
							Sand live oak-------	---	--	
47**: Placid.										

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
47**:										
Myakka	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	2	
							Baldcypress	---	--	
							Blackgum	---	--	
							Sweetbay	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
Myakka	8W	Slight	Moderate	Moderate	Moderate	Moderate	Slash pine	70	8	Slash pine, South Florida slash pine, longleaf pine.
							Longleaf pine	60	4	
							South Florida slash pine	35	3	
							Live oak	---	--	
							Water oak	---	--	
48 Pomello	8S	Slight	Moderate	Severe	Moderate	Moderate	Slash pine	70	8	Sand pine, slash pine, South Florida slash pine.
							Longleaf pine	60	4	
							Sand pine	60	3	
							South Florida slash pine	35	3	
49**:										
Pomello	8S	Slight	Moderate	Severe	Moderate	Moderate	Slash pine	70	8	Sand pine, slash pine, South Florida slash pine.
							Longleaf pine	60	4	
							Sand pine	60	3	
							South Florida slash pine	35	3	
Urban land.										
50 Pompano	8W	Slight	Severe	Severe	Slight	Moderate	Slash pine	70	8	Slash pine, South Florida slash pine.
							South Florida slash pine	45	4	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
51**:										
Pompano	3W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	3	
							Cabbage palm	---	--	
							Red maple	---	--	
							Blackgum	---	--	
							Pond pine	---	--	
							Loblollybay gordonia	---	--	
							Sweetbay	---	--	
							Baldcypress	---	--	
Felda	2W	Slight	Severe	Severe	Moderate	Severe	Pondcypress	75	2	
							Baldcypress	---	--	
							Blackgum	---	--	
							Cabbage palm	---	--	
							Pond pine	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
Oklawaha	6W	Slight	Severe	Severe	Severe	Severe		---	--	
52 St. Lucie	3S	Slight	Severe	Moderate	Slight	Slight	Sand pine	60	3	Sand pine.
							Sand live oak	---	--	
							Bluejack oak	---	--	
53**:										
St. Lucie	3S	Slight	Severe	Moderate	Slight	Slight	Sand pine	60	3	Sand pine.
							Sand live oak	---	--	
							Bluejack oak	---	--	
Urban land.										
54 Seffner	10W	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	South Florida slash pine.
							Longleaf pine	70	6	
							Live oak	80	--	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
55, 56 Sparr	10W	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine.
							Loblolly pine	80	8	
							Longleaf pine	70	6	
							Laurel oak	---	--	
							Water oak	---	--	
							Live oak	---	--	
							Dogwood	---	--	
							Magnolia	---	--	
							Hickory	---	--	
57 Tavares	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine, South Florida slash pine.
							Longleaf pine	70	6	
							South Florida slash pine	45	4	
							Turkey oak	---	--	
							Bluejack oak	---	--	
58**:										
Tavares	10S	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine, South Florida slash pine.
							Longleaf pine	70	6	
							South Florida slash pine	45	4	
							Turkey oak	---	--	
							Bluejack oak	---	--	
Urban land.										
[illegible] Wabasso	10W	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine, South Florida slash pine, longleaf pine, loblolly pine.
							South Florida slash pine	45	4	
							Longleaf pine	65	5	
							Loblolly pine	80	8	
							Live oak	---	--	
							Water oak	---	--	
60 Wauchula	10W	Slight	Moderate	Moderate	Slight	Moderate	Slash pine	80	10	Slash pine, South Florida slash pine.
							Longleaf pine	65	5	
							South Florida slash pine	45	4	

See footnote at end of table.

TABLE E.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
61**:										
Astor	6W	Slight	Severe	Severe	Moderate	Severe	Baldcypress	100	6	
							Sweetgum	---	--	
							Water oak	---	--	
							Cabbage palm	---	--	
							Blackgum	---	--	
							Laurel oak	---	--	
							Red maple	---	--	
							Pond pine	---	--	
Astor	6W	Slight	Severe	Severe	Moderate	Severe	Baldcypress	100	6	Slash pine, South Florida slash pine, loblolly pine.
							Sweetgum	---	--	
							Water oak	---	--	
							Cabbage palm	---	--	
							Cypress	---	--	
							Red maple	---	--	
62 Hontoon	6W	Slight	Severe	Severe	Severe	Severe	Baldcypress	100	6	
							Blackgum	---	--	
							White ash	---	--	
							Loblollybay gordonia	---	--	
							Red maple	---	--	
							Sweetbay	---	--	
							Cypress	---	--	
							Pond pine	---	--	
65 Placid	6W	Slight	Severe	Severe	Moderate	Moderate	Baldcypress	100	6	
							Sweetgum	---	--	
							Water oak	---	--	
							Laurel oak	---	--	
							Red maple	---	--	
							Pondcypress	---	--	
							Pond pine	---	--	

* Productivity class is the yield in cubic meters per hectare per year calculated at the age of culmination of mean annual increment for fully stocked natural stands.

** See description of the map unit for composition and behavior characteristics of the map unit.

TABLE F.--WILDLIFE HABITAT

(See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated)

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
2*. Arents										
3*: Arents.										
Urban land	---	---	---	---	---	---	---	---	---	---
4 Anclote	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
5*:										
Anclote	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Myakka	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Good.
Felda	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
6*:										
Anclote	Very poor.	Very poor.	Poor	Fair	Poor	Good	Good	Very poor.	Poor	Good.
Delray	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Hontoon	Very poor.	Very poor.	Poor	Poor	Very poor.	Good	Good	Very poor.	Poor	Good.
7 Apopka	Poor	Fair	Fair	Poor	Fair	Very poor.	Very poor.	Fair	Poor	Very poor.
8*:										
Apopka	Poor	Fair	Fair	Poor	Fair	Very poor.	Very poor.	Fair	Poor	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---
9 Apopka	Poor	Fair	Fair	Poor	Fair	Very poor.	Very poor.	Fair	Poor	Very poor.
10 Astatula	Poor	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
11*:										
Brighton	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Brighton	Fair	Good	---	---	---	Good	Good	Good	---	Good.
12*:										
Bluff	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
12*:										
Manatee	Very poor.	Poor	Poor	Poor	Fair	Good	Good	Poor	Poor	Good.
13 Candler	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
14*:										
Candler	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---
15 Candler	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
16*:										
Candler	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---
17 Candler	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
18 Cassia	Very poor.	Poor	Poor	Poor	Fair	Very poor.	Very poor.	Poor	Poor	Very poor.
19 Ellzey	Good	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Fair	Fair.
20 Emeralda	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
21 Eureka	Poor	Fair	Fair	Fair	Good	Good	Good	Fair	Good	Good.
22*:										
Everglades	Fair	Fair	---	---	---	Good	Good	Fair	---	Good.
Everglades	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
23 Felda	Poor	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Poor	Fair.
24 Fellowship	Very poor.	Very poor.	Poor	Poor	Poor	Good	Good	Very poor.	Poor	Good.
25 Immokalee	Poor	Poor	Fair	Poor	Poor	Fair	Poor	Poor	Poor	Poor.
26, 27 Kendrick	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Very poor.
28 Lake	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
29*:										
Lake	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---
30, 31 Lake	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
32 Lochloosa	Fair	Fair	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
33 Manatee	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
34 Martel	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
35 Myakka	Poor	Fair	Fair	Poor	Poor	Fair	Poor	Fair	Poor	Poor.
36*:										
Myakka	Poor	Fair	Fair	Poor	Poor	Fair	Poor	Fair	Poor	Poor.
Placid	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Myakka	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Good.
37*:										
Ocoee	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Ocoee	Fair	Fair	---	---	---	Good	Good	Fair	---	Good.
38*:										
Oklawaha	Very poor.	Very poor.	Poor	Poor	Very poor.	Good	Good	Very poor.	Poor	Good.
Oklawaha	Fair	Fair	---	---	---	Good	Good	Fair	---	Good.
39 Ona	Poor	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Fair	Fair.
40 Orlando	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
41 Orsino	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
42 Paola	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
43*:										
Paola	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
44---------- Paola	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
45*:										
Pits----------	---	---	---	---	---	---	---	---	---	---
Water.----------	---	---	---	---	---	---	---	---	---	---
46---------- Placid	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
47*:										
Placid----------	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Myakka----------	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Good.
Myakka----------	Poor	Fair	Fair	Poor	Poor	Fair	Poor	Fair	Poor	Poor.
48---------- Pomello	Poor	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
49*:										
Pomello----------	Poor	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land--------	---	---	---	---	---	---	---	---	---	---
50---------- Pompano	Poor	Fair	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Fair.
51*:										
Pompano----------	Very poor.	Very poor.	Poor	Poor	Poor	Good	Good	Very poor.	Poor	Good.
Felda----------	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Oklawaha----------	Very poor.	Very poor.	Poor	Poor	Very poor.	Good	Good	Very poor.	Poor	Good.
52---------- St. Lucie	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
53*:										
St. Lucie---------	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Urban land--------	---	---	---	---	---	---	---	---	---	---
54---------- Seffner	Poor	Poor	Fair	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
55, 56---------- Sparr	Poor	Fair	Good	Fair	Fair	Poor	Fair	Fair	Fair	Poor.
57---------- Tavares	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

See footnote at end of table.

TABLE F.--WILDLIFE HABITAT--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
58*:										
Tavares	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Urban land	---	---	---	---	---	---	---	---	---	---
59 Wabasso	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair	Poor.
60 Wauchula	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Poor	Poor.
61*:										
Astor	Very poor.	Very poor.	Poor	Fair	Poor	Good	Good	Very poor.	Fair	Good.
Astor	Very poor.	Poor	Poor	Fair	Poor	Good	Good	Poor	Fair	Good.
62 Hontoon	Very poor.	Very poor.	Poor	Poor	Very poor.	Good	Good	Very poor.	Poor	Good.
63 Terra Ceia	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
64*:										
Placid	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Samsula	Very poor.	Very poor.	Poor	Fair	Very poor.	Good	Good	Very poor.	Poor	Good.
65 Placid	Very poor.	Very poor.	Poor	Fair	Poor	Good	Fair	Very poor.	Poor	Good.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE G.--RECREATIONAL DEVELOPMENT

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated)

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
2* Arents	----	----	----	----	----
3*:					
Arents	----	----	----	----	----
Urban land	Variable	Variable	Variable	Variable	Variable.
4 Anclote	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
5*:					
Anclote	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
Myakka	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
Felda	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding, droughty.
6*:					
Anclote	Severe: flooding, wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness, flooding.	Severe: wetness, too sandy.	Severe: wetness, flooding.
Delray	Severe: flooding, wetness, too sandy.	Severe: wetness, too sandy.	Severe: wetness.	Severe: wetness, too sandy.	Severe: wetness, flooding.
Hontoon	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: ponding, excess humus.
7 Apopka	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
8*:					
Apopka	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
9 Apopka	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty.

See footnote at end of table.

TABLE G.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
10 Astatula	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
11*:					
Brighton	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
Brighton	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
12*:					
Bluff	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness.	Severe: wetness, flooding.
Manatee	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness, flooding.	Severe: wetness.	Severe: wetness, flooding.
13 Candler	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
14*:					
Candler	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
15 Candler	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty.
16*:					
Candler	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
17 Candler	Severe: slope, too sandy.	Severe: slope, too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty, slope.
18 Cassia	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: wetness, droughty, too sandy.
19 Ellzey	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
20 Emeralda	Severe: flooding, wetness, percs slowly.	Severe: wetness, too sandy, percs slowly.	Severe: too sandy, wetness, flooding.	Severe: wetness, too sandy.	Severe: wetness, flooding.

See footnote at end of table.

TABLE 6.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
21 Eureka	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
22*:					
Everglades	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
Everglades	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
23 Felda	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness, droughty.
24 Fellowship	Severe: ponding, percs slowly.	Severe: ponding, percs slowly.	Severe: ponding, percs slowly.	Severe: ponding.	Severe: ponding.
25 Immokalee	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness, droughty.
26 Kendrick	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: droughty, too sandy.
27 Kendrick	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Moderate: droughty, too sandy.
28 Lake	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
29*:					
Lake	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
30 Lake	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty.
31 Lake	Severe: slope, too sandy.	Severe: slope, too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty, slope.
32 Lochloosa	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: too sandy.
33 Manatee	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.

See footnote at end of table.

TABLE G.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
34 Martel	Severe: ponding, percs slowly.	Severe: ponding, percs slowly.	Severe: ponding, percs slowly.	Severe: ponding, erodes easily.	Severe: ponding.
35 Myakka	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
36*:					
Myakka	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
Placid	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
Myakka	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
37*:					
Ocoee	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
Ocoee	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
38*:					
Oklawaha	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
Oklawaha	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
39 Ona	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
40 Orlando	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: droughty, too sandy.
41 Orsino	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
42 Paola	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
43*:					
Paola	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.

See footnote at end of table.

TABLE G.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
43*:					
Urban land	Variable	Variable	Variable	Variable	Variable.
44 Paola	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Severe: droughty.
45*:					
Pits	Variable	Variable	Variable	Variable	Variable.
Water	---	---	---	---	---
46 Placid	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
47*:					
Placid	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
Myakka	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
Myakka	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness.
48 Pomello	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
49*:					
Pomello	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
50 Pompano	Severe: wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness.	Severe: wetness, too sandy.	Severe: wetness, droughty.
51*:					
Pompano	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding, droughty.
Felda	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding, droughty.
Oklawaha	Severe: flooding, wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: wetness, excess humus.	Severe: wetness, flooding, excess humus.
52 St. Lucie	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.

See footnote at end of table.

TABLE G.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
53*:					
St. Lucie	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
54 Seffner	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: wetness, droughty, too sandy.
55 Sparr	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Moderate: wetness, too sandy, droughty.
56 Sparr	Severe: too sandy.	Severe: too sandy.	Severe: slope, too sandy.	Severe: too sandy.	Moderate: wetness, too sandy, droughty.
57 Tavares	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
58*:					
Tavares	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable.
59 Wabasso	Severe: wetness, percs slowly, too sandy.	Severe: wetness, too sandy, percs slowly.	Severe: too sandy, wetness, percs slowly.	Severe: wetness, too sandy.	Severe: wetness.
60 Wauchula	Severe: too sandy, wetness.	Severe: too sandy, wetness.	Severe: too sandy, wetness.	Severe: too sandy, wetness.	Severe: wetness.
61*:					
Astor	Severe: flooding, wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness, flooding.	Severe: wetness, too sandy.	Severe: wetness, flooding.
Astor	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: ponding.
62 Hontoon	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: excess humus, ponding.	Severe: ponding, excess humus.
63 Terra Ceia	Severe: wetness, excess humus.	Severe: wetness, excess humus.	Severe: excess humus, wetness, flooding.	Severe: ponding, excess humus, wetness.	Severe: wetness, excess humus, flooding.

See footnote at end of table.

TABLE 6.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
64*:					
Placid	Severe: ponding, too sandy.	Severe: ponding, too sandy.	Severe: too sandy, ponding.	Severe: ponding, too sandy.	Severe: ponding.
Samsula	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
65 Placid	Severe: flooding, wetness, too sandy.	Severe: wetness, too sandy.	Severe: too sandy, wetness, flooding.	Severe: wetness, too sandy.	Severe: wetness, flooding.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE H.--ENGINEERING INDEX PROPERTIES

(The symbol < means less than; > means more than. Absence of an entry indicates that data were not estimated)

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
2*---------- Arents	---	----------	---	---	---	---	---	---	---	---	---
	---	----------	---	---	---	---	---	---	---	---	---
	---	----------	---	---	---	---	---	---	---	---	---
3*:											
Arents----------	---	----------	---	---	---	---	---	---	---	---	---
	---	----------	---	---	---	---	---	---	---	---	---
	---	----------	---	---	---	---	---	---	---	---	---
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
4---------- Anclote	0-19	Fine sand--------	SP, SP-SM	A-3, A-2-4	0	100	95-100	85-100	2-12	---	NP
	19-72	Sand, fine sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	95-100	85-100	2-20	---	NP
5*:											
Anclote---------	0-19	Fine sand--------	SP, SP-SM	A-3, A-2-4	0	100	95-100	85-100	2-12	---	NP
	19-72	Sand, fine sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	95-100	85-100	2-20	---	NP
Myakka----------	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
Felda----------	0-4	Fine sand--------	SP, SP-SM	A-3	0	100	100	90-100	2-5	---	NP
	4-22	Sand, fine sand	SP, SP-SM	A-3	0	100	100	90-100	2-5	---	NP
	22-32	Sandy loam, fine sandy loam, sandy clay loam.	SM, SC-SM, SC	A-2-4, A-2-6	0	100	100	90-100	15-35	<40	NP-15
	32-60	Sand, fine sand, loamy sand.	SP, SP-SM	A-3, A-2-4	0	100	100	80-100	2-12	---	NP
6*:											
Anclote---------	0-18	Sand----------	SP, SP-SM	A-3, A-2-4	0	100	95-100	85-100	2-12	---	NP
	18-80	Sand, fine sand	SP, SP-SM	A-3, A-2-4	0	100	95-100	85-100	2-12	---	NP
Delray----------	0-18	Sand----------	SP-SM, SM, SC-SM	A-3, A-2-4	0	100	100	95-100	5-20	<20	NP-5
	18-46	Fine sand, sand	SP-SM	A-3, A-2-4	0	100	100	95-100	5-12	---	NP
	46-60	Sandy loam, fine sandy loam, sandy clay loam.	SM, SC-SM, SC	A-2-4, A-2-6	0	100	100	95-100	20-35	<40	NP-15
	60-75	Loamy fine sand, loamy sand, fine sandy loam.	SM, SC-SM	A-2-4	0	100	100	95-100	13-20	<20	NP-5

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag- ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
6*:											
Hontoon---------	0-65	Muck----------	PT	A-8	0	---	---	---	---	---	---
	65-70	Mucky sand, sand, loamy sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	60-95	2-20	---	NP
	70-80	Variable---------	---	---	---	---	---	---	---	---	---
7---------- Apopka	0-55	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	3-10	---	NP
	55-80	Sandy loam, sandy clay loam, sandy clay.	SC-SM, SC	A-2-4, A-2-6, A-4, A-6	0	98-100	95-100	60-95	20-40	20-40	4-20
8*:											
Apopka----------	0-55	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	3-10	---	NP
	55-80	Sandy loam, sandy clay loam, sandy clay.	SC-SM, SC	A-2-4, A-2-6, A-4, A-6	0	98-100	95-100	60-95	20-40	20-40	4-20
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
9---------- Apopka	0-55	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	3-10	---	NP
	55-80	Sandy loam, sandy clay loam, sandy clay.	SC-SM, SC	A-2-4, A-2-6, A-4, A-6	0	98-100	95-100	60-95	20-40	20-40	4-20
10---------- Astatula	0-3	Sand----------	SP, SP-SM	A-3	0	100	100	75-99	1-7	---	NP
	3-86	Sand, fine sand	SP, SP-SM	A-3	0	100	100	75-99	1-7	---	NP
11*:											
Brighton--------	0-12	Muck----------	PT	---	---	---	---	---	---	---	---
	12-80	Mucky-peat-------	PT	---	---	---	---	---	---	---	---
Brighton--------	0-12	Muck----------	PT	---	---	---	---	---	---	---	---
	12-80	Mucky-peat-------	PT	---	---	---	---	---	---	---	---
12*:											
Bluff----------	0-17	Sandy clay loam	SC	A-6, A-7	0	100	95-100	85-95	36-50	35-50	20-35
	17-29	Sandy clay loam, sandy clay.	SC, CL, CH	A-6, A-7	0	100	95-100	85-95	36-55	35-55	20-40
	29-38	Sandy clay loam, sandy clay, loam.	SC	A-6, A-7	0	95-100	90-100	80-95	36-50	35-50	20-35
	38-60	Sandy clay loam, sandy clay, loam.	SC	A-6, A-7	0	95-100	90-100	80-95	36-50	35-50	20-35
Manatee---------	0-18	Loamy fine sand	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	8-15	---	NP
	18-36	Fine sandy loam, sandy loam.	SC-SM, SC	A-2-4	0	100	100	90-100	18-30	<30	4-10
	36-48	Fine sandy loam, sandy loam, loamy fine sand.	SM, SC-SM, SC	A-2-4	0	95-100	90-100	85-100	13-30	<30	NP-10
	48-60	Fine sandy loam, sandy loam, loamy fine sand.	SM, SC-SM, SC	A-2-4	0-5	60-100	50-100	50-100	13-30	<30	NP-10

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag- ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
13---------- Candler	0-5	Sand----------	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	5-67	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	67-95	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	95-100	75-100	5-12	---	NP
	95-99	Sandy loam, sandy clay loam.	SM	A-2-4, A-4	0	100	95-100	80-100	20-40	<30	NP-7
14*:											
Candler---------	0-5	Sand----------	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	5-67	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	67-95	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	95-100	75-100	5-12	---	NP
	95-99	Sandy loam, sandy clay loam.	SM	A-2-4, A-4	0	100	95-100	80-100	20-40	<30	NP-7
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
15---------- Candler	0-5	Sand----------	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	5-67	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	67-95	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	95-100	75-100	5-12	---	NP
	95-99	Sandy loam, sandy clay loam.	SM	A-2-4, A-4	0	100	95-100	80-100	20-40	<30	NP-7
16*:											
Candler---------	0-5	Sand----------	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	5-67	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	67-95	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	95-100	75-100	5-12	---	NP
	95-99	Sandy loam, sandy clay loam.	SM	A-2-4, A-4	0	100	95-100	80-100	20-40	<30	NP-7
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
17---------- Candler	0-5	Sand----------	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	5-67	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	75-100	2-8	---	NP
	67-95	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	95-100	75-100	5-12	---	NP
	95-99	Sandy loam, sandy clay loam.	SM	A-2-4, A-4	0	100	95-100	80-100	20-40	<30	NP-7
18---------- Cassia	0-25	Sand----------	SP, SP-SM	A-3	0	100	100	90-100	2-7	---	NP
	25-37	Sand, fine sand, loamy sand.	SP-SM, SM	A-3, A-2-4	0	100	100	90-100	5-20	---	NP
	37-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	90-100	2-10	---	NP
19---------- Ellzey	0-12	Sand----------	SP-SM	A-3	0	100	100	85-98	5-10	---	NP
	12-37	Fine sand, sand	SP, SP-SM	A-3	0	100	100	90-98	2-8	---	NP
	37-58	Loamy fine sand, loamy sand.	SP-SM, SM	A-2-4	0	100	100	95-98	10-30	---	NP
	58-80	Fine sand, sand	SP, SP-SM	A-3	0	100	100	90-98	2-8	---	NP
20---------- Emeralda	0-6	Fine sand--------	SP-SM, SM	A-3, A-2-4	0	100	100	90-99	8-15	---	NP
	6-11	Fine sand, loamy fine sand, loamy sand.	SP-SM, SM	A-2-4	0	100	100	90-99	10-25	---	NP
	11-56	Sandy clay, clay	CH, SC, CL	A-7	0	100	100	90-99	45-80	46-66	23-39
	56-66	Sandy clay, clay	CH, SC, CL	A-7	0	100	100	90-99	45-80	46-66	23-39

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
21---------- Eureka	0-11	Loamy fine sand	SM	A-2-4	0	100	100	85-99	15-30	---	NP
	11-20	Sandy clay, clay	CH, SC, CL	A-7-6	0	100	100	85-99	45-70	45-85	30-60
	20-72	Sandy clay, sandy clay loam, clay.	CL, CH, SC	A-6, A-7, A-4	0	100	98-100	80-99	45-80	30-55	8-30
22*:											
Everglades------	0-8	Muck----------	PT	A-8	0	---	---	---	---	---	---
	8-28	Mucky-peat-------	PT	A-8	0	---	---	---	---	---	---
	28-80	Peat, mucky-peat, muck.	PT	A-8	0	---	---	---	---	---	---
Everglades------	0-8	Muck----------	PT	A-8	0	---	---	---	---	---	---
	8-28	Mucky-peat-------	PT	A-8	0	---	---	---	---	---	---
	28-80	Peat, mucky-peat, muck.	PT	A-8	0	---	---	---	---	---	---
23---------- Felda	0-22	Fine sand--------	SP, SP-SM	A-3	0	100	100	90-99	2-5	---	NP
	22-32	Sandy loam, fine sandy loam, sandy clay loam.	SM, SC-SM, SC	A-2-4, A-2-6	0	100	100	90-99	15-35	<40	NP-15
	32-60	Sand, fine sand, loamy sand.	SP, SP-SM	A-3, A-2-4	0	100	100	80-99	2-12	---	NP
24---------- Fellowship	0-11	Fine sandy loam	SM	A-2-4	0-5	75-90	75-90	70-85	13-28	---	NP
	11-18	Sandy loam-------	SM, SC-SM	A-2-4	0-5	75-90	75-90	70-85	25-35	<28	NP-7
	18-25	Sandy clay loam, sandy clay.	SC	A-6, A-7	0-5	75-90	75-90	70-85	36-50	35-55	17-35
	25-42	Sandy clay, clay	SC, CH	A-7	0-5	75-90	75-90	70-85	45-75	50-70	30-50
	42-80	Clay----------	CH	A-7	0	100	95-100	90-99	75-90	55-80	30-50
25---------- Immokalee	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	70-100	2-10	---	NP
	6-35	Fine sand, sand	SP, SP-SM	A-3	0	100	100	70-100	2-10	---	NP
	35-54	Fine sand, sand	SP-SM, SM	A-3, A-2-4	0	100	100	70-100	5-21	---	NP
	54-72	Fine sand, sand	SP, SP-SM	A-3	0	100	100	70-100	2-10	---	NP
26, 27---------- Kendrick	0-26	Sand----------	SP-SM, SM	A-3, A-2-4	0	95-100	90-100	75-100	5-19	---	NP
	26-32	Sandy clay loam, fine sandy loam, sandy loam.	SC, SC-SM	A-2-6, A-2-4	0	95-100	90-100	85-100	25-35	20-35	4-18
	32-79	Sandy clay loam, sandy clay.	SC	A-2-6, A-6	0	95-100	90-100	85-100	25-45	25-40	9-20
	79-80	Sandy clay loam, sandy loam.	SC, SC-SM	A-2-6, A-2-4	0	95-100	90-100	85-100	25-35	20-35	4-18
28---------- Lake	0-86	Sand----------	SP-SM	A-3, A-2-4	0	100	100	85-98	5-12	---	NP
29*:											
Lake----------	0-86	Sand----------	SP-SM	A-3, A-2-4	0	100	100	85-98	5-12	---	NP
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
30, 31---------- Lake	0-86	Sand----------	SP-SM	A-3, A-2-4	0	100	100	85-98	5-12	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
32---------- Lochloosa	0-28	Sand----------	SP-SM, SM	A-2-4, A-3	0	95-100	95-100	90-98	8-20	---	NP
	28-32	Fine sandy loam, sandy loam, loamy sand.	SM, SC-SM	A-2-4	0	95-100	95-100	90-98	18-30	<28	NP-6
	32-57	Sandy clay loam, sandy loam.	SC, SC-SM	A-2, A-4, A-6	0	95-100	95-100	90-98	25-40	25-40	5-18
	57-69	Sandy clay, sandy clay loam.	SC	A-6, A-7	0	95-100	95-100	90-98	40-50	35-45	15-25
	69-75	Sandy clay loam, sandy loam.	SC, SC-SM	A-2, A-4, A-6	0	95-100	95-100	90-98	25-40	25-40	5-18
33---------- Manatee	0-18	Fine sand--------	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	8-15	---	NP
	18-36	Fine sandy loam, sandy loam.	SC-SM, SC, SM	A-2-4	0	100	100	90-100	18-30	<30	NP-10
	36-48	Fine sandy loam, sandy loam, loamy fine sand.	SM, SC-SM, SC	A-2-4	0	95-100	90-100	85-100	13-30	<30	NP-10
	48-60	Fine sandy loam, sandy loam, loamy fine sand.	SM, SC-SM, SC, GM	A-2-4	0-5	60-100	50-100	50-100	13-30	<30	NP-10
34---------- Martel	0-19	Sandy clay loam	SC, CL	A-4, A-6	0	100	95-100	90-100	36-55	25-40	8-20
	19-72	Sandy clay, clay	CL, CH	A-7	0	100	95-100	90-100	51-70	41-60	25-40
35---------- Myakka	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
36*:											
Myakka----------	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
Placid----------	0-20	Sand----------	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
	20-75	Fine sand, sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
Myakka----------	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
37*:											
Ocoee----------	0-16	Mucky-peat-------	PT	A-8	0	---	---	---	---	---	---
	16-38	Mucky-peat, peat	PT	A-8	0	---	---	---	---	---	---
	38-75	Sand----------	SP, SP-SM	A-3	0	100	100	80-98	2-5	---	NP
Ocoee----------	0-16	Mucky-peat-------	PT	A-8	0	---	---	---	---	---	---
	16-38	Mucky-peat, peat	PT	A-8	0	---	---	---	---	---	---
	38-75	Sand----------	SP, SP-SM	A-3	0	100	100	80-98	2-5	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag- ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
38*:											
Oklawaha--------	0-9	Muck----------	PT	---	---	---	---	---	---	---	---
	9-25	Muck, peat-------	PT	---	---	---	---	---	---	---	---
	25-31	Sandy loam, sandy clay loam, sandy clay.	SM, SC-SM, SC	A-2-4, A-2-6, A-6, A-7	0	100	100	90-100	20-50	<50	NP-30
	31-54	Sandy clay, clay	SC, CL, CH	A-7	0	95-100	85-100	80-100	40-85	43-80	25-48
Oklawaha--------	0-9	Muck----------	PT	---	---	---	---	---	---	---	---
	9-25	Muck, peat-------	PT	---	---	---	---	---	---	---	---
	25-31	Sandy loam, sandy clay loam, sandy clay.	SM, SC-SM, SC	A-2-4, A-2-6, A-6, A-7	0	100	100	90-100	20-50	<50	NP-30
	31-54	Sandy clay, clay	SC, CL, CH	A-7	0	95-100	85-100	80-100	40-85	43-80	25-48
39---------- Ona	0-6	Fine sand--------	SP-SM, SP	A-3	0	100	100	85-95	3-10	---	NP
	6-20	Fine sand, sand	SP-SM, SM	A-3, A-2-4	0	100	100	85-95	5-20	---	NP
	20-82	Fine sand, sand	SP-SM, SP	A-3	0	100	100	85-95	3-10	---	NP
40---------- Orlando	0-20	Fine sand--------	SP, SP-SM	A-3, A-2-4	0	100	100	85-100	1-12	---	NP
	20-88	Sand, fine sand	SP, SP-SM	A-3, A-2-4	0	100	100	85-100	1-12	---	NP
41---------- Orsino	0-4	Sand----------	SP	A-3	0	100	100	88-100	1-3	---	NP
	4-22	Sand, fine sand	SP	A-3	0	100	100	88-100	1-3	---	NP
	22-80	Sand, fine sand	SP	A-3	0	100	100	88-100	2-5	---	NP
42---------- Paola	0-3	Sand----------	SP	A-3	0	100	100	85-100	1-2	---	NP
	3-25	Sand, fine sand	SP	A-3	0	100	100	85-100	1-2	---	NP
	25-80	Sand, fine sand	SP	A-3	0	100	100	80-100	1-4	---	NP
43*:											
Paola----------	0-3	Sand----------	SP	A-3	0	100	100	85-100	1-2	---	NP
	3-25	Sand, fine sand	SP	A-3	0	100	100	85-100	1-2	---	NP
	25-80	Sand, fine sand	SP	A-3	0	100	100	80-100	1-4	---	NP
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
44---------- Paola	0-3	Sand----------	SP	A-3	0	100	100	85-100	1-2	---	NP
	3-25	Sand, fine sand	SP	A-3	0	100	100	85-100	1-2	---	NP
	25-80	Sand, fine sand	SP	A-3	0	100	100	80-100	1-4	---	NP
45*:											
Pits----------	---	----------	---	---	---	---	---	---	---	---	---
Water.											
46---------- Placid	0-20	Sand----------	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
	20-80	Sand, fine sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
47*:											
Placid----------	0-20	Sand----------	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
	20-80	Sand, fine sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
47*:											
Myakka----------	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
Myakka----------	0-6	Sand----------	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	6-20	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-10	---	NP
	20-36	Sand, fine sand, loamy fine sand.	SM, SP-SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	36-80	Sand, fine sand	SP, SP-SM	A-3	0	100	100	85-100	2-8	---	NP
48---------- Pomello	0-42	Sand----------	SP, SP-SM	A-3	0	100	100	60-100	1-8	---	NP
	42-64	Coarse sand, sand, fine sand.	SP-SM, SM	A-3, A-2-4	0	100	100	60-100	6-15	---	NP
	64-80	Coarse sand, sand, fine sand.	SP, SP-SM	A-3	0	100	100	60-100	4-10	---	NP
49*:											
Pomello---------	0-42	Sand----------	SP, SP-SM	A-3	0	100	100	60-100	1-8	---	NP
	42-64	Coarse sand, sand, fine sand.	SP-SM, SM	A-3, A-2-4	0	100	100	60-100	6-15	---	NP
	64-80	Coarse sand, sand, fine sand.	SP, SP-SM	A-3	0	100	100	60-100	4-10	---	NP
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
50---------- Pompano	0-80	Sand----------	SP, SP-SM	A-3, A-2-4	0	100	100	75-100	1-12	---	NP
51*:											
Pompano---------	0-80	Fine sand--------	SP, SP-SM	A-3, A-2-4	0	100	100	75-100	1-12	---	NP
Felda----------	0-4	Fine sand--------	SP, SP-SM	A-3	0	100	100	90-100	2-5	---	NP
	4-22	Sand, fine sand	SP, SP-SM	A-3	0	100	100	90-100	2-5	---	NP
	22-32	Sandy loam, fine sandy loam, sandy clay loam.	SM, SC-SM, SC	A-2-4, A-2-6	0	100	100	90-100	15-35	<40	NP-15
	32-60	Sand, fine sand, loamy sand.	SP, SP-SM	A-3, A-2-4	0	100	100	80-100	2-12	---	NP
Oklawaha--------	0-9	Muck----------	PT	---	---	---	---	---	---	---	---
	9-25	Muck, peat-------	PT	---	---	---	---	---	---	---	---
	25-31	Sandy loam, sandy clay loam, sandy clay.	SM, SC-SM, SC	A-2-4, A-2-6, A-6, A-7	0	100	100	90-100	20-50	<50	NP-30
	31-54	Sandy clay, clay	SC, CL, CH	A-7	0	95-100	85-100	80-100	40-85	43-80	25-48
52---------- St. Lucie	0-3	Sand----------	SP	A-3	0	100	90-100	80-99	1-4	---	NP
	3-80	Sand, fine sand	SP	A-3	0	100	90-100	80-99	1-4	---	NP
53*:											
St. Lucie-------	0-3	Sand----------	SP	A-3	0	100	90-100	80-99	1-4	---	NP
	3-80	Sand, fine sand	SP	A-3	0	100	90-100	80-99	1-4	---	NP
Urban land------	---	----------	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
54---------- Seffner	0-13	Sand----------	SP-SM, SP	A-3, A-2-4	0	100	100	85-100	1-12	---	NP
	13-21	Fine sand, sand	SP-SM, SP	A-3, A-2-4	0	100	100	85-100	1-12	---	NP
	21-80	Fine sand, sand	SP-SM, SP	A-3, A-2-4	0	97-100	75-100	70-100	1-12	---	NP
55, 56---------- Sparr	0-8	Sand----------	SP-SM, SM	A-3, A-2-4	0	100	100	75-99	5-14	---	NP
	8-48	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	100	100	75-99	5-14	---	NP
	48-56	Sandy loam, sandy clay loam, fine sandy loam.	SC-SM, SC, SM	A-2-4	0	100	100	75-99	25-35	<30	NP-10
	56-72	Sandy clay, sandy clay loam, sandy loam.	SC, SC-SM	A-2, A-4, A-6	0	100	95-100	75-99	28-50	22-40	5-15
	72-99	Sandy clay loam, sandy loam, fine sandy loam.	SC, SC-SM, SM	A-2, A-4, A-6	0	100	95-100	75-99	25-40	<35	NP-12
57---------- Tavares	0-7	Sand----------	SP, SP-SM	A-3	0	100	95-100	85-100	2-10	---	NP
	7-80	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	85-100	2-10	---	NP
58*:											
Tavares---------	0-7	Sand----------	SP, SP-SM	A-3	0	100	95-100	85-100	2-10	---	NP
	7-80	Sand, fine sand	SP, SP-SM	A-3	0	100	95-100	85-100	2-10	---	NP
Urban land------	---	----------	---	---	---	---	---	---	---	---	---
59---------- Wabasso	0-4	Sand----------	SP, SP-SM	A-3	0	100	100	95-100	2-10	---	NP
	4-16	Sand, fine sand	SP, SP-SM	A-3	0	100	100	95-100	2-10	---	NP
	16-28	Sand, fine sand, loamy sand.	SP-SM, SM	A-3, A-2-4	0	100	100	95-100	5-20	---	NP
	28-32	Sand, fine sand	SP, SP-SM	A-3	0	100	100	95-100	2-10	---	NP
	32-48	Sandy loam, fine sandy loam, sandy clay loam.	SC, SC-SM	A-2-4, A-2-6	0	100	100	95-100	20-35	20-30	5-13
	48-75	Sand, fine sand, loamy sand.	SP-SM, SM	A-3, A-2-4	0	100	100	95-100	5-20	---	NP
60---------- Wauchula	0-6	Sand----------	SP-SM	A-3, A-2-4	0	100	100	90-100	5-12	---	NP
	6-22	Sand, fine sand	SP-SM	A-3, A-2-4	0	100	100	90-100	5-12	---	NP
	22-34	Sand, fine sand, loamy fine sand.	SP-SM, SM	A-3, A-2-4	0	100	100	90-100	8-25	---	NP
	34-38	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	100	100	90-100	5-20	---	NP
	38-50	Sandy loam, fine sandy loam, sandy clay loam.	SM, SC-SM, SC	A-2-4, A-2-6, A-4, A-6	0	100	92-100	90-100	25-50	<40	NP-20
	50-80	Loamy fine sand, fine sandy loam.	SM, SC-SM	A-2-4	0	100	95-100	85-100	15-25	<26	NP-8
61*:											
Astor----------	0-32	Sand----------	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	32-80	Sand, fine sand, loamy sand.	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP

See footnote at end of table.

TABLE H.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO		4	10	40	200		
	In				Pct					Pct	
61*:											
Astor----------	0-32	Mucky sand-------	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
	32-80	Sand, fine sand, loamy sand.	SP-SM, SM	A-3, A-2-4	0	100	100	85-100	5-20	---	NP
62---------- Hontoon	0-65	Muck----------	PT	A-8	0	---	---	---	---	---	---
	65-70	Mucky sand, sand, loamy sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	60-95	2-20	---	NP
	70-80	Variable---------	---	---	---	---	---	---	---	---	---
63---------- Terra Ceia	0-65	Muck----------	PT	A-8	---	---	---	---	---	---	---
64*:											
Placid----------	0-20	Fine sand--------	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
	20-80	Sand, fine sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
Samsula---------	0-36	Muck----------	PT	---	---	---	---	---	---	---	---
	36-55	Sand, fine sand, loamy sand.	SP-SM, SM, SP	A-3, A-2-4	0	100	100	80-100	2-20	---	NP
65---------- Placid	0-11	Sand----------	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP
	11-80	Fine sand, sand, loamy fine sand.	SP, SP-SM, SM	A-3, A-2-4	0	100	100	90-100	1-20	---	NP

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

(The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Organic matter" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
2*---------- Arents	---	---	---	---	---	---	---	---	--	--	---	---
	---	---	---	---	---	---	---	---	--	--	---	---
	---	---	---	---	---	---	---	---	--	--	---	---
3*:												
Arents----------	---	---	---	---	---	---	---	---	--	--	---	---
	---	---	---	---	---	---	---	---	--	--	---	---
	---	---	---	---	---	---	---	---	--	--	---	---
Urban land------		---	---	---	---	---		---	---	---	---	---
4---------- Anclote	0-19	2-8	1.30-1.45	6.0-20	0.10-0.15	5.1-8.4	<2	Low--------	0.10	5	2	2-9
	19-72	1-13	1.50-1.65	6.0-20	0.03-0.10	5.1-8.4	<2	Low--------	0.10			
5*:												
Anclote----------	0-19	2-8	1.30-1.45	6.0-20	0.10-0.15	5.1-8.4	<2	Low--------	0.10	5	2	2-9
	19-72	1-13	1.50-1.65	6.0-20	0.03-0.10	5.1-8.4	<2	Low--------	0.10			
Myakka----------	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low--------	0.10	5	2	2-7
	6-20	2-8	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low--------	0.10			
	20-36	2-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low--------	0.15			
	36-80	0-2	1.45-1.60	6.0-20	0.02-0.10	3.6-6.5	<2	Low--------	0.10			
Felda----------	0-4	1-3	1.40-1.55	6.0-20	0.05-0.10	5.1-7.8	<2	Low--------	0.10	4	2	1-4
	4-22	1-3	1.45-1.55	6.0-20	0.02-0.05	5.1-7.8	<2	Low--------	0.10			
	22-32	13-30	1.50-1.60	0.6-6.0	0.10-0.15	6.1-7.8	<2	Low--------	0.24			
	32-60	1-10	1.50-1.65	6.0-20	0.02-0.05	6.1-8.4	<2	Low--------	0.17			
6*:												
Anclote----------	0-18	2-8	1.30-1.45	6.0-20	0.10-0.15	5.6-8.4	<2	Low--------	0.10	5	2	2-10
	18-80	2-8	1.50-1.65	6.0-20	0.03-0.10	5.6-8.4	<2	Low--------	0.10			
Delray----------	0-18	3-13	1.35-1.45	6.0-20	0.10-0.15	5.6-7.3	<2	Low--------	0.10	5	1	2-5
	18-46	1-7	1.50-1.65	6.0-20	0.05-0.08	6.1-7.3	<2	Low--------	0.10			
	46-60	13-30	1.45-1.60	0.6-6.0	0.10-0.15	6.6-7.8	<2	Low--------	0.24			
	60-75	10-18	1.50-1.65	2.0-6.0	0.07-0.10	7.4-7.8	<2	Low--------	0.17			
Hontoon----------	0-65	---	0.20-0.40	6.0-20	0.30-0.50	<4.5	<2	Low--------	----	---	2	75-85
	65-70	1-5	1.30-1.55	6.0-20	0.15-0.20	4.5-5.5	<2	Low--------	0.10			
	70-80	---	---	---	---	---	---	---	----			
7---------- Apopka	0-55	<3	1.45-1.60	6.0-20	0.03-0.05	4.5-6.0	<2	Low--------	0.10	5	2	<2
	55-80	18-37	1.55-1.75	0.6-2.0	0.12-0.17	4.5-6.0	<2	Low--------	0.24			
8*:												
Apopka----------	0-55	<3	1.45-1.60	6.0-20	0.03-0.05	4.5-6.0	<2	Low--------	0.10	5	2	<2
	55-80	18-37	1.55-1.75	0.6-2.0	0.12-0.17	4.5-6.0	<2	Low--------	0.24			
Urban land------	---	---	---	---	---	---	---	---	----	---	---	---
9---------- Apopka	0-55	<3	1.45-1.60	6.0-20	0.03-0.05	4.5-6.0	<2	Low--------	0.10	5	2	<2
	55-80	18-37	1.55-1.75	0.6-2.0	0.12-0.17	4.5-6.0	<2	Low--------	0.24			
10---------- Astatula	0-3	1-3	1.25-1.55	>20	0.04-0.10	4.5-6.5	<2	Low--------	0.10	5	2	.5-2
	3-86	1-3	1.45-1.60	>20	0.02-0.05	4.5-6.5	<2	Low--------	0.10			

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
11*:												
Brighton--------	0-12	---	0.15-0.35	6.0-20	0.20-0.50	3.6-4.4	<2	Low-------	0.10	2	2	60-90
	12-80	---	0.15-0.35	6.0-20	0.20-0.40	3.6-4.4	<2	Low-------	----			
Brighton--------	0-12	---	0.15-0.35	6.0-20	0.20-0.50	3.6-4.4	<2	Low-------	0.10	2	2	60-90
	12-80	---	0.15-0.35	6.0-20	0.20-0.40	3.6-4.4	<2	Low-------	----			
12*:												
Bluff----------	0-17	20-40	0.65-1.55	0.2-0.6	0.18-0.20	5.6-7.3	<2	Moderate	0.28	5	6	5-11
	17-29	20-40	1.30-1.70	0.06-0.2	0.12-0.17	6.1-8.4	<2	High------	0.28			
	29-38	20-40	1.30-1.70	0.06-0.2	0.12-0.17	6.1-8.4	<2	High------	0.28			
	38-60	20-40	1.30-1.70	0.06-0.2	0.12-0.17	7.4-8.4	<2	High------	0.28			
Manatee---------	0-18	2-8	1.20-1.40	2.0-6.0	0.15-0.20	5.6-7.8	<2	Low-------	0.10	5	2	4-10
	18-36	10-20	1.50-1.65	0.6-2.0	0.10-0.15	6.6-7.8	<2	Low-------	0.24			
	36-48	6-20	1.55-1.70	0.6-2.0	0.08-0.15	7.4-8.4	<2	Low-------	0.24			
	48-60	6-20	1.55-1.70	0.6-2.0	0.08-0.15	7.4-8.4	<2	Low-------	0.24			
13---------- Candler	0-5	<3	1.35-1.55	6.0-20	0.04-0.08	4.5-6.0	<2	Low-------	0.10	5	2	.5-2
	5-67	<3	1.50-1.65	6.0-20	0.02-0.06	4.5-6.0	<2	Low-------	0.10			
	67-95	3-8	1.50-1.65	6.0-20	0.05-0.08	4.5-6.0	<2	Low-------	0.10			
	95-99	14-30	1.55-1.65	2.0-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.20			
14*:												
Candler---------	0-5	<3	1.35-1.55	6.0-20	0.04-0.08	4.5-6.0	<2	Low-------	0.10	5	2	.5-2
	5-67	<3	1.50-1.65	6.0-20	0.02-0.06	4.5-6.0	<2	Low-------	0.10			
	67-95	3-8	1.50-1.65	6.0-20	0.05-0.08	4.5-6.0	<2	Low-------	0.10			
	95-99	14-30	1.55-1.65	2.0-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.20			
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
15---------- Candler	0-5	<3	1.35-1.55	6.0-20	0.04-0.08	4.5-6.0	<2	Low-------	0.10	5	2	.5-2
	5-67	<3	1.50-1.65	6.0-20	0.02-0.06	4.5-6.0	<2	Low-------	0.10			
	67-95	3-8	1.50-1.65	6.0-20	0.05-0.08	4.5-6.0	<2	Low-------	0.10			
	95-99	14-30	1.55-1.65	2.0-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.20			
16*:												
Candler---------	0-5	<3	1.35-1.55	6.0-20	0.04-0.08	4.5-6.0	<2	Low-------	0.10	5	2	.5-2
	5-67	<3	1.50-1.65	6.0-20	0.02-0.06	4.5-6.0	<2	Low-------	0.10			
	67-95	3-8	1.50-1.65	6.0-20	0.05-0.08	4.5-6.0	<2	Low-------	0.10			
	95-99	14-30	1.55-1.65	2.0-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.20			
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
17---------- Candler	0-5	<3	1.35-1.55	6.0-20	0.04-0.08	4.5-6.0	<2	Low-------	0.10	5	2	.5-2
	5-67	<3	1.50-1.65	6.0-20	0.02-0.06	4.5-6.0	<2	Low-------	0.10			
	67-95	3-8	1.50-1.65	6.0-20	0.05-0.08	4.5-6.0	<2	Low-------	0.10			
	95-99	14-30	1.55-1.65	2.0-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.20			
18---------- Cassia	0-25	1-4	1.30-1.55	6.0-20	0.03-0.07	4.5-6.0	<2	Low-------	0.10	5	2	<1
	25-37	2-10	1.30-1.55	0.6-6.0	0.10-0.15	4.5-6.0	<2	Low-------	0.15			
	37-80	1-5	1.40-1.60	6.0-20	0.03-0.07	4.5-6.0	<2	Low-------	0.10			
19---------- Ellzey	0-12	1-5	1.35-1.45	2.0-6.0	0.10-0.20	5.6-7.3	<2	Low-------	0.10	5	2	2-6
	12-37	2-6	1.35-1.50	2.0-6.0	0.10-0.15	5.6-7.3	<2	Low-------	0.10			
	37-58	8-14	1.50-1.60	0.6-2.0	0.15-0.20	4.5-7.3	<2	Low-------	0.17			
	58-80	2-7	1.40-1.60	2.0-6.0	0.10-0.15	4.5-7.3	<2	Low-------	0.10			

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
20---------- Emeralda	0-6	2-8	1.25-1.50	6.0-20	0.10-0.15	5.1-6.5	<2	Low--------	0.10	5	---	3-10
	6-11	4-12	1.40-1.70	6.0-20	0.05-0.10	5.1-6.5	<2	Low--------	0.15			
	11-56	38-60	1.30-1.60	<0.2	0.10-0.20	6.1-8.4	<2	High-------	0.24			
	56-66	38-60	1.30-1.60	<0.2	0.10-0.20	7.9-8.4	<2	High-------	0.24			
21---------- Eureka	0-11	2-12	1.40-1.60	6.0-20	0.10-0.15	4.5-5.5	<2	Low--------	0.15	5	2	1-4
	11-20	35-55	1.40-1.50	<0.2	0.15-0.20	4.5-5.5	<2	High-------	0.32			
	20-72	20-50	1.30-1.50	<0.2	0.14-0.18	4.5-5.5	<2	Moderate	0.28			
22*:												
Everglades-------	0-8	---	0.15-0.35	6.0-20	0.20-0.50	4.5-7.8	<2	Low--------	----	---	2	60-80
	8-28	---	0.15-0.35	6.0-20	0.45-0.50	4.5-7.8	<2	Low--------	----			
	28-80	---	0.10-0.20	>20	0.45-0.50	4.5-7.8	<2	Low--------	----			
Everglades-------	0-8	---	0.15-0.35	6.0-20	0.20-0.50	4.5-7.8	<2	Low--------	----	---	2	60-80
	8-28	---	0.15-0.35	6.0-20	0.45-0.50	4.5-7.8	<2	Low--------	----			
	28-80	---	0.10-0.20	>20	0.45-0.50	4.5-7.8	<2	Low--------	----			
23---------- Felda	0-22	1-3	1.40-1.55	6.0-20	0.02-0.05	5.1-7.8	<2	Low--------	0.10	5	2	1-4
	22-32	13-30	1.50-1.65	0.6-6.0	0.10-0.15	6.1-7.8	<2	Low--------	0.24			
	32-60	1-10	1.50-1.65	6.0-20	0.02-0.05	6.1-8.4	<2	Low--------	0.10			
24---------- Fellowship	0-11	2-18	1.35-1.65	2.0-6.0	0.07-0.12	4.5-6.0	<2	Low--------	0.20	4	---	2-9
	11-18	8-20	1.40-1.65	0.6-2.0	0.10-0.14	4.5-6.0	<2	Low--------	0.24			
	18-25	20-40	1.35-1.60	0.06-0.2	0.15-0.20	4.5-6.0	<2	Moderate	0.28			
	25-42	35-60	1.30-1.60	<0.06	0.15-0.20	4.5-6.0	<2	High-------	0.28			
	42-80	40-60	1.20-1.55	<0.06	0.15-0.20	4.5-6.0	<2	Very high	0.28			
25---------- Immokalee	0-6	1-5	1.20-1.50	6.0-20	0.05-0.10	3.6-6.0	<2	Low--------	0.10	5	2	1-2
	6-35	1-5	1.45-1.70	6.0-20	0.02-0.05	3.6-6.0	<2	Low--------	0.10			
	35-54	2-7	1.30-1.70	0.6-2.0	0.10-0.25	3.6-6.0	<2	Low--------	0.15			
	54-72	1-5	1.40-1.70	6.0-20	0.02-0.05	3.6-6.0	<2	Low--------	0.10			
26, 27---------- Kendrick	0-26	1-7	1.25-1.50	6.0-20	0.05-0.07	4.5-6.0	<2	Low--------	0.10	5	2	<2
	26-32	15-25	1.55-1.70	0.6-6.0	0.10-0.15	4.5-6.0	<2	Low--------	0.24			
	32-79	20-40	1.55-1.75	0.06-2.0	0.12-0.20	4.5-6.0	<2	Low--------	0.32			
	79-80	15-25	1.55-1.75	0.06-2.0	0.12-0.15	4.5-6.0	<2	Low--------	0.32			
28---------- Lake	0-86	1-3	1.45-1.65	>6.0	0.03-0.08	4.5-5.5	<2	Low--------	0.10	5	2	.5-1
29*:												
Lake----------	0-86	1-3	1.45-1.65	>6.0	0.03-0.08	4.5-5.5	<2	Low--------	0.10	5	2	.5-1
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
30, 31---------- Lake	0-86	1-3	1.45-1.65	>6.0	0.03-0.08	4.5-5.5	<2	Low--------	0.10	5	2	.5-1
32---------- Lochloosa	0-28	2-12	1.35-1.65	2.0-20	0.05-0.20	4.5-5.5	<2	Low--------	0.10	5	2	1-4
	28-32	13-20	1.55-1.70	0.6-6.0	0.10-0.15	4.5-5.5	<2	Low--------	0.24			
	32-57	15-35	1.55-1.70	0.6-0.2	0.12-0.15	4.5-5.5	<2	Low--------	0.28			
	57-69	20-45	1.60-1.70	0.06-0.2	0.13-0.18	4.5-5.5	<2	Low--------	0.28			
	69-75	15-35	1.55-1.70	0.06-0.2	0.10-0.15	4.5-5.5	<2	Low--------	0.28			
33---------- Manatee	0-18	2-8	1.20-1.40	2.0-6.0	0.15-0.20	5.6-7.8	<2	Low--------	0.10	5	2	4-15
	18-36	10-20	1.50-1.65	0.6-2.0	0.10-0.15	6.6-8.4	<2	Low--------	0.24			
	36-48	6-20	1.55-1.70	0.6-2.0	0.08-0.15	7.4-8.4	<2	Low--------	0.24			
	48-60	6-20	1.55-1.70	0.6-2.0	0.08-0.15	7.4-8.4	<2	Low--------	0.24			

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
34---------- Martel	0-19	15-35	1.20-1.50	0.6-2.0	0.15-0.20	4.5-5.5	<2	Moderate	0.32	5	3	1-6
	19-72	35-55	1.30-1.70	<0.06	0.13-0.18	4.5-5.5	<2	High------	0.28			
35---------- Myakka	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low-------	0.10	5	2	2-5
	6-20	0-2	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low-------	0.10			
	20-36	1-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low-------	0.15			
	36-80	0-2	1.48-1.70	6.0-20	0.02-0.10	3.6-6.5	<2	Low-------	0.10			
36*:												
Myakka----------	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low-------	0.10	5	2	2-5
	6-20	0-2	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low-------	0.10			
	20-36	1-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low-------	0.15			
	36-80	0-2	1.48-1.70	6.0-20	0.02-0.10	3.6-6.5	<2	Low-------	0.10			
Placid----------	0-20	<10	1.20-1.40	6.0-20	0.15-0.20	3.6-5.5	<2	Low-------	0.10	5	1	2-10
	20-75	<10	1.30-1.60	6.0-20	0.05-0.08	3.6-6.5	<2	Low-------	0.10			
Myakka----------	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low-------	0.10	5	2	2-7
	6-20	2-8	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low-------	0.10			
	20-36	2-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low-------	0.15			
	36-80	0-2	1.45-1.60	6.0-20	0.02-0.10	3.6-6.5	<2	Low-------	0.10			
37*:												
Ocoee----------	0-16	---	0.20-1.00	2.0-6.0	0.20-0.25	3.6-5.0	<2	Low-------	----	---	2	20-80
	16-38	---	0.20-1.00	6.0-20	0.45-0.50	3.6-4.4	<2	Low-------	----			
	38-75	1-5	1.45-1.70	>20	0.02-0.05	3.6-5.0	<2	Low-------	0.10			
Ocoee----------	0-16	---	0.20-1.00	2.0-6.0	0.20-0.25	3.6-5.0	<2	Low-------	----	---	2	20-80
	16-38	---	0.20-1.00	6.0-20	0.45-0.50	3.6-4.4	<2	Low-------	----			
	38-75	1-5	1.45-1.70	>20	0.02-0.05	3.6-5.0	<2	Low-------	0.10			
38*:												
Oklawaha--------	0-9	---	0.15-0.40	2.0-20	0.20-0.25	4.5-6.0	<2	Low-------	----	---	2	80-95
	9-25	---	0.15-0.35	2.0-20	0.20-0.25	4.5-6.0	<2	Low-------	----			
	25-31	12-40	1.50-1.60	0.2-2.0	0.05-0.10	6.1-8.4	<2	Moderate	0.24			
	31-54	35-60	1.55-1.65	0.06-0.2	0.10-0.15	6.1-8.4	<2	High------	0.32			
Oklawaha--------	0-9	---	0.15-0.40	2.0-20	0.20-0.25	4.5-6.0	<2	Low-------	----	---	2	80-95
	9-25	---	0.15-0.35	2.0-20	0.20-0.25	4.5-6.0	<2	Low-------	----			
	25-31	12-40	1.50-1.60	0.2-2.0	0.05-0.10	6.1-8.4	<2	Moderate	0.24			
	31-54	35-60	1.55-1.65	0.06-0.2	0.10-0.15	6.1-8.4	<2	High------	0.32			
39---------- Ona	0-6	1-7	1.40-1.55	6.0-20	0.10-0.15	3.6-6.0	<2	Low-------	0.10	5	2	1-5
	6-20	3-8	1.50-1.65	0.6-2.0	0.10-0.15	3.6-6.0	<2	Low-------	0.15			
	20-82	1-4	1.50-1.65	6.0-20	0.03-0.08	3.6-6.0	<2	Low-------	0.10			
40---------- Orlando	0-20	1-8	1.35-1.45	6.0-20	0.07-0.12	4.5-6.5	<2	Low-------	0.10	5	2	1-5
	20-88	1-8	1.40-1.60	6.0-20	0.03-0.06	4.5-6.0	<2	Low-------	0.10			
41---------- Orsino	0-4	<1	1.25-1.40	>20	0.02-0.08	3.6-6.0	<2	Low-------	0.10	5	1	<1
	4-22	<1	1.35-1.55	>20	0.02-0.07	3.6-6.0	<2	Low-------	0.10			
	22-80	<2	1.35-1.55	>20	0.02-0.08	3.6-6.0	<2	Low-------	0.10			
42---------- Paola	0-3	0-2	1.20-1.45	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10	5	1	<.5
	3-25	0-2	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10			
	25-80	0-3	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10			
43*:												
Paola----------	0-3	0-2	1.20-1.45	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10	5	1	<.5
	3-25	0-2	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10			
	25-80	0-3	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low-------	0.10			

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
43*:												
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
44---------- Paola	0-3	0-2	1.20-1.45	>20	0.02-0.05	3.6-7.3	<2	Low--------	0.10	5	1	<.5
	3-25	0-2	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low--------	0.10			
	25-80	0-3	1.45-1.60	>20	0.02-0.05	3.6-7.3	<2	Low--------	0.10			
45*:												
Pits----------	---	---	---	---	---	---	---	----------	----	---	---	---
Water.												
46---------- Placid	0-20	<10	1.20-1.40	6.0-20	0.15-0.20	3.6-5.5	<2	Low--------	0.10	5	2	2-10
	20-80	<10	1.30-1.60	6.0-20	0.05-0.08	3.6-5.5	<2	Low--------	0.10			
47*:												
Placid----------	0-20	<10	1.20-1.40	6.0-20	0.15-0.20	3.6-5.5	<2	Low--------	0.10	5	2	2-10
	20-80	<10	1.30-1.60	6.0-20	0.05-0.08	3.6-5.5	<2	Low--------	0.10			
Myakka----------	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low--------	0.10	5	2	2-7
	6-20	2-8	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low--------	0.10			
	20-36	2-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low--------	0.15			
	36-80	0-2	1.45-1.60	6.0-20	0.02-0.10	3.6-6.5	<2	Low--------	0.10			
Myakka----------	0-6	1-3	1.25-1.45	6.0-20	0.05-0.15	3.6-6.5	<2	Low--------	0.10	5	2	2-5
	6-20	0-2	1.45-1.60	6.0-20	0.02-0.05	3.6-6.5	<2	Low--------	0.10			
	20-36	1-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	<2	Low--------	0.15			
	36-80	0-2	1.48-1.70	6.0-20	0.02-0.10	3.6-6.5	<2	Low--------	0.10			
48---------- Pomello	0-42	<2	1.35-1.65	>20	0.02-0.05	4.5-6.0	<2	Low--------	0.10	5	1	<1
	42-64	<2	1.45-1.60	2.0-6.0	0.10-0.30	4.5-6.0	<2	Low--------	0.15			
	64-80	<2	1.35-1.65	6.0-20	0.02-0.05	4.5-6.0	<2	Low--------	0.10			
49*:												
Pomello----------	0-42	<2	1.35-1.65	>20	0.02-0.05	4.5-6.0	<2	Low--------	0.10	5	1	<1
	42-64	<2	1.45-1.60	2.0-6.0	0.10-0.30	4.5-6.0	<2	Low--------	0.15			
	64-80	<2	1.35-1.65	6.0-20	0.02-0.05	4.5-6.0	<2	Low--------	0.10			
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
50---------- Pompano	0-80	0-5	1.30-1.65	6.0-20	0.02-0.05	4.5-7.8	<2	Low--------	0.10	5	2	1-5
51*:												
Pompano----------	0-80	0-5	1.30-1.65	6.0-20	0.02-0.05	4.5-7.8	<2	Low--------	0.10	5	2	1-5
Felda----------	0-4	1-3	1.40-1.55	6.0-20	0.05-0.10	5.1-7.8	<2	Low--------	0.10	4	2	1-4
	4-22	1-3	1.45-1.55	6.0-20	0.02-0.05	5.1-7.8	<2	Low--------	0.10			
	22-32	13-30	1.50-1.60	0.6-6.0	0.10-0.15	6.1-7.8	<2	Low--------	0.24			
	32-60	1-10	1.50-1.65	6.0-20	0.02-0.05	6.1-8.4	<2	Low--------	0.17			
Oklawaha----------	0-9	---	0.15-0.40	2.0-20	0.20-0.25	4.5-6.0	<2	Low--------	----	---	2	80-95
	9-25	---	0.15-0.35	2.0-20	0.20-0.25	4.5-6.0	<2	Low--------	----			
	25-31	12-40	1.50-1.60	0.2-2.0	0.05-0.10	6.1-8.4	<2	Moderate	0.24			
	31-54	35-60	1.55-1.65	0.06-0.2	0.10-0.15	6.1-8.4	<2	High------	0.32			
52---------- St. Lucie	0-3	0-1	1.50-1.60	>20	0.02-0.05	3.6-7.3	<2	Low--------	0.10	5	1	0-1
	3-80	0-1	1.50-1.60	>20	0.02-0.03	3.6-7.3	<2	Low--------	0.10			

See footnote at end of table.

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
53*:												
St. Lucie-------	0-3	0-1	1.50-1.60	>20	0.02-0.05	3.6-7.3	<2	Low--------	0.10	5	1	0-1
	3-80	0-1	1.50-1.60	>20	0.02-0.03	3.6-7.3	<2	Low--------	0.10			
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
54---------- Seffner	0-13	1-8	1.35-1.45	6.0-20	0.07-0.12	4.5-7.3	<2	Low--------	0.10	5	2	1-5
	13-21	1-8	1.35-1.45	6.0-20	0.07-0.12	4.5-7.3	<2	Low--------	0.10			
	21-80	1-8	1.50-1.60	6.0-20	0.04-0.08	4.5-7.3	<2	Low--------	0.10			
55, 56---------- Sparr	0-8	1-5	1.20-1.50	6.0-20	0.08-0.12	3.6-6.5	<2	Low--------	0.10	5	2	<3
	8-48	1-5	1.45-1.70	6.0-20	0.05-0.08	3.6-6.5	<2	Low--------	0.10			
	48-56	15-32	1.55-1.80	0.6-2.0	0.10-0.15	3.6-6.5	<2	Low--------	0.20			
	56-72	12-38	1.55-1.80	0.06-0.6	0.10-0.18	3.6-6.5	<2	Low--------	0.24			
	72-99	15-30	1.55-1.70	0.06-0.6	0.10-0.15	3.6-6.5	<2	Low--------	0.24			
57---------- Tavares	0-7	0-4	1.25-1.65	>6.0	0.05-0.10	3.6-6.0	<2	Low--------	0.10	5	2	.5-2
	7-80	0-4	1.40-1.70	>6.0	0.02-0.05	3.6-6.0	<2	Low--------	0.10			
58*:												
Tavares---------	0-7	0-4	1.25-1.65	>6.0	0.05-0.10	3.6-6.0	<2	Low--------	0.10	5	2	.5-2
	7-80	0-4	1.40-1.70	>6.0	0.02-0.05	3.6-6.0	<2	Low--------	0.10			
Urban land------	---	---	---	---	---	---	---	----------	----	---	---	---
59---------- Wabasso	0-4	1-5	1.25-1.50	6.0-20	0.03-0.08	3.6-6.5	<2	Low--------	0.10	5	2	1-4
	4-16	0-5	1.35-1.70	6.0-20	0.02-0.05	3.6-6.5	<2	Low--------	0.10			
	16-28	1-12	1.50-1.75	0.6-2.0	0.10-0.15	4.5-7.3	<2	Low--------	0.15			
	28-32	2-5	1.40-1.70	6.0-20	0.02-0.05	5.1-8.4	<2	Low--------	0.10			
	32-48	12-30	1.60-1.85	<0.2	0.10-0.15	5.1-8.4	<2	Low--------	0.24			
	48-75	2-12	1.40-1.70	6.0-20	0.05-0.10	7.4-8.4	<2	Low--------	0.10			
60---------- Wauchula	0-6	<2	1.25-1.45	2.0-20	0.08-0.15	3.6-5.5	<2	Low--------	0.10	5	2	1-3
	6-22	<2	1.45-1.60	6.0-20	0.02-0.10	3.6-5.5	<2	Low--------	0.10			
	22-34	2-8	1.45-1.60	0.2-6.0	0.15-0.25	3.6-5.5	<2	Low--------	0.15			
	34-38	<2	1.45-1.65	2.0-6.0	0.08-0.15	4.5-5.5	<2	Low--------	0.10			
	38-50	15-30	1.60-1.80	0.06-0.2	0.10-0.17	4.5-5.5	<2	Low--------	0.20			
	50-80	11-20	1.60-1.75	0.06-0.6	0.15-0.20	4.5-5.5	<2	Low--------	0.15			
61*:												
Astor----------	0-32	2-7	1.30-1.60	6.0-20	0.15-0.20	6.1-8.4	<2	Low--------	0.10	5	2	2-9
	32-80	2-7	1.50-1.70	6.0-20	0.05-0.10	6.1-8.4	<2	Low--------	0.10			
Astor----------	0-32	2-7	1.20-1.55	6.0-20	0.20-0.25	6.1-8.4	<2	Low--------	0.10	5	2	9-15
	32-80	2-7	1.50-1.70	6.0-20	0.05-0.10	6.1-8.4	<2	Low--------	0.10			
62---------- Hontoon	0-65	---	0.20-0.40	6.0-20	0.30-0.50	<4.5	<2	Low--------	----	---	2	75-85
	65-70	1-5	1.30-1.55	6.0-20	0.15-0.20	4.5-5.5	<2	Low--------	0.10			
	70-80	---	---	---	---	---	---	----------	----			
63---------- Terra Ceia	0-65	---	0.15-0.35	6.0-20	0.30-0.50	4.5-8.4	<2	Low--------	----	2	2	>60
64*:												
Placid----------	0-20	<10	1.20-1.40	6.0-20	0.15-0.20	3.6-5.5	<2	Low--------	0.10	5	2	2-10
	20-80	<10	1.30-1.60	6.0-20	0.05-0.08	3.6-5.5	<2	Low--------	0.10			
Samsula---------	0-36	---	0.10-0.50	6.0-20	0.20-0.25	4.5-5.5	<2	Low--------	----	2	2	>20
	36-55	1-14	1.35-1.55	6.0-20	0.02-0.05	<4.5	<2	Low--------	0.17			

See footnote at end of table.

TABLE 3.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodi-bility group	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH	mmhos/cm					Pct
65---------- Placid	0-11	0-10	1.20-1.40	6.0-20	0.15-0.20	3.6-5.5	<2	Low-------	0.10	5	2	2-10
	11-80	0-10	1.30-1.60	6.0-20	0.05-0.08	3.6-5.5	<2	Low-------	0.10			

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE K.--SOIL AND WATER FEATURES

("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text. The symbol < means less than; > means more than. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Soil name and map symbol	Hydrologic group	Flooding			High water table			Subsidence		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Initial	Total	Uncoated steel	Concrete
					Ft			In	In		
2*: Arents	---	---	---	---	---	---	---	---	---	---	---
3*:											
Arents	---	---	---	---	---	---	---	---	---	---	---
Urban land	---	---	---	---	---	---	---	---	---	---	---
4: Anclote	D	None	---	---	+2-0	Apparent	Jun-Mar	---	---	High	Moderate.
5*:											
Anclote	D	None	---	---	+2-0	Apparent	Jun-Mar	---	---	High	Moderate.
Myakka	D	None	---	---	+2-0	Apparent	Jun-Mar	---	---	High	High.
Felda	D	None	---	---	+2-1.0	Apparent	Jun-Dec	---	---	High	High.
6*:											
Anclote	D	Frequent	Long	Jun-Nov	0-0.5	Apparent	Jun-Oct	---	---	High	Moderate.
Delray	B/D	Frequent	Very long.	Jun-Mar	0-0.5	Apparent	Jun-Oct	---	---	Moderate	Low.
Hontoon	B/D	None	---	---	+2-0	Apparent	Jun-Apr	16-24	>52	High	High.
7: Apopka	A	None	---	---	>6.0	---	---	---	---	Moderate	High.
8*:											
Apopka	A	None	---	---	>6.0	---	---	---	---	Moderate	High.
Urban land	---	---	---	---		---	---	---	---	---	---
9: Apopka	A	None	---	---	>6.0	---	---	---	---	Moderate	High.
10: Astatula	A	None	---	---	>6.0	---	---	---	---	Low	High.
11*:											
Brighton	B/D	None	---	---	+1-1.0	Apparent	Jan-Dec	16-20	50-60	High	High.
Brighton	B/D	None	---	---	+1-1.0	Apparent	Jan-Dec	16-20	50-60	High	High.
12*:											
Bluff	D	Frequent	Brief to long.	Jun-Nov	0-0.5	Apparent	Jul-Dec	---	---	Moderate	Low.
Manatee	D	Frequent	Very long.	Jun-Feb	0-0.5	Apparent	Jun-Oct	---	---	Moderate	Low.
13: Candler	A	None	---	---	>6.0	---	---	---	---	Low	High.

See footnote at end of table.

TABLE K.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Subsidence		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Initial	Total	Uncoated steel	Concrete
					Ft			In	In		
14*:											
Candler	A	None	---	---	>6.0	---	---	---	---	Low	High.
Urban land	---	---	---	---		---	---	---	---	---	---
15 Candler	A	None	---	---	>6.0	---	---	---	---	Low	High.
16*:											
Candler	A	None	---	---	>6.0	---	---	---	---	Low	High.
Urban land	---	---	---	---	---	---	---	---	---	---	---
17 Candler	A	None	---	---	>6.0	---	---	---	---	Low	High.
18 Cassia	C	None	---	---	1.5-3.5	Apparent	Jul-Jan	---	---	Moderate	High.
19 Ellzey	B/D	None	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High	High.
20 Emeralda	D	Frequent	Long	Jun-Feb	0-0.5	Apparent	Jun-Oct	---	---	High	Low.
21 Eureka	D	None	---	---	0-1.0	Apparent	Jun-Oct	---	---	High	High.
22*:											
Everglades	B/D	Frequent	Very long.	Jun-Jan	0-0.5	Apparent	Jan-Dec	4-10	>76	Moderate	Moderate.
Everglades	B/D	Frequent	Very long.	Jun-Jan	0-0.5	Apparent	Jan-Dec	4-10	>76	Moderate	Moderate.
23 Felda	B/D	None	---	---	0-1.0	Apparent	Jul-Mar	---	---	High	Moderate.
24 Fellowship	D	None	---	---	+2-0	Perched	Jun-Mar	---	---	High	High.
25 Immokalee	B/D	None	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High	High.
26, 27 Kendrick	A	None	---	---	>6.0	---	---	---	---	Moderate	High.
28 Lake	A	None	---	---	>6.0	---	---	---	---	Low	High.
29*:											
Lake	A	None	---	---	>6.0	---	---	---	---	Low	High.
Urban land	---	---	---	---	---	---	---	---	---	---	---
30, 31 Lake	A	None	---	---	>6.0	---	---	---	---	Low	High.
32 Lochloosa	C	None	---	---	2.5-5.0	Apparent	Jul-Oct	---	---	High	High.

See footnote at end of table.

TABLE K.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydro-logic group	Flooding			High water table			Subsidence		Risk of corrosion	
		Frequency	Dura-tion	Months	Depth	Kind	Months	Initial	Total	Uncoated steel	Concrete
					Ft			In	In		
33---------- Manatee	D	None--------	---	---	+2-0	Apparent	Jun-Mar	---	---	High------	Low.
34---------- Martel	D	None--------	---	---	+1-0	Apparent	May-Nov	---	---	Moderate	High.
35---------- Myakka	B/D	None--------	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High------	High.
36*:											
Myakka---------	B/D	None--------	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High------	High.
Placid---------	B/D	None--------	---	---	0-1.0	Apparent	Jun-Mar	---	---	High------	High.
Myakka---------	D	None--------	---	---	+2-0	Apparent	Jun-Mar	---	---	High------	High.
37*:											
Ocoee----------	B/D	Frequent---	Long---	Jan-Jun	0-0.5	Apparent	Jun-Apr	5-10	33-37	High------	High.
Ocoee----------	B/D	Frequent---	Long---	Jan-Jun	0-0.5	Apparent	Jun-Apr	5-10	33-37	High------	High.
38*:											
Oklawaha-------	B/D	Frequent---	Long---	Jan-Jun	0-0.5	Apparent	Jun-Apr	16-20	20-35	High------	Low.
Oklawaha-------	B/D	Frequent---	Long---	Jan-Jun	0-0.5	Apparent	Jun-Apr	16-20	20-35	High------	Low.
39---------- Ona	B/D	None--------	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High------	High.
40---------- Orlando	A	None--------	---	---	>6.0	---	---	---	---	Low-------	High.
41---------- Orsino	A	None--------	---	---	3.5-5.0	Apparent	Jun-Dec	---	---	Low-------	Moderate.
42---------- Paola	A	None--------	---	---	>6.0	---	---	---	---	Low-------	High.
43*:											
Paola----------	A	None--------	---	---	>6.0	---	---	---	---	Low-------	High.
Urban land-----	---	----------	---	---	---	---	---	---	---	---	---
44---------- Paola	A	None--------	---	---	>6.0	---	---	---	---	Low-------	High.
45*:											
Pits----------	---	----------	---	---	---	---	---	---	---	---	---
Water.											
46---------- Placid	D	None--------	---	---	+2-1.0	Apparent	Jun-Mar	---	---	High------	High.
47*:											
Placid---------	D	None--------	---	---	+2-1.0	Apparent	Jun-Mar	---	---	High------	High.
Myakka---------	D	None--------	---	---	+2-0	Apparent	Jun-Mar	---	---	High------	High.
Myakka---------	B/D	None--------	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High------	High.

See footnote at end of table.

TABLE K.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Subsidence		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Initial	Total	Uncoated steel	Concrete
					Ft			In	In		
48 Pomello	C	None	---	---	2.0-3.5	Apparent	Jul-Nov	---	---	Low	High.
49*:											
Pomello	C	None	---	---	2.0-3.5	Apparent	Jul-Nov	---	---	Low	High.
Urban land	---	---	---	---	---	---	---	---	---	---	---
50 Pompano	B/D	None	---	---	0-0.5	Apparent	Jun-Oct	---	---	High	Moderate.
51*:											
Pompano	D	None	---	---	+2-0	Apparent	Jun-Mar	---	---	High	Moderate.
Felda	D	None	---	---	+2-1.0	Apparent	Jun-Dec	---	---	High	High.
Oklawaha	B/D	Frequent	Long	Jan-Jun	0-0.5	Apparent	Jun-Apr	16-20	20-35	High	Low.
52 St. Lucie	A	None	---	---	>6.0	---	---	---	---	Low	Moderate.
53*:											
St. Lucie	A	None	---	---	>6.0	---	---	---	---	Low	Moderate.
Urban land	---	---	---	---	---	---	---	---	---	---	---
54 Seffner	C	None	---	---	1.5-3.5	Apparent	Jun-Nov	---	---	Low	Moderate.
55, 56 Sparr	C	None	---	---	1.5-3.5	Apparent	Jul-Oct	---	---	Moderate	High.
57 Tavares	A	None	---	---	3.5-6.0	Apparent	Jun-Dec	---	---	Low	High.
58*:											
Tavares	A	None	---	---	3.5-6.0	Apparent	Jun-Dec	---	---	Low	High.
Urban land	---	---	---	---	---	---	---	---	---	---	---
59 Wabasso	B/D	None	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	Moderate	High.
60 Wauchula	B/D	None	---	---	0.5-1.5	Apparent	Jun-Sep	---	---	High	High.
61*:											
Astor	D	Frequent	Very long.	Jun-Jan	0-0.5	Apparent	Jun-Oct	---	---	High	Low.
Astor	B/D	None	---	---	+2-0	Apparent	Jun-Jan	---	---	High	Low.
62 Hontoon	B/D	None	---	---	+2-0	Apparent	Jun-Apr	16-24	>52	High	High.
63 Terra Ceia	D	Frequent	Long	Jun-Nov	0-0.5	Apparent	Jun-Apr	16-20	50-60	Moderate	Moderate.
64*:											
Placid	D	None	---	---	+2-1.0	Apparent	Jun-Mar	---	---	High	High.

See footnote at end of table.

TABLE K.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Subsidence		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Initial	Total	Uncoated steel	Concrete
					Ft			In	In		
64*:											
Samsula-------	B/D	None-------	---	---	+2-0	Apparent	Jun-Apr	16-20	30-36	High-----	High.
65---------- Placid	D	Frequent---	Brief	Jun-Nov	0-1.0	Apparent	Jun-Nov	---	---	High-----	High.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE L.--SANITARY FACILITIES

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "good," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
2* Arents					
3*: Arents					
Urban land	Variable	Variable	Variable	Variable	Variable.
4 Anclote	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
5*: Anclote	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Myakka	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Felda	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
6*: Anclote	Severe: flooding, wetness, poor filter.	Severe: seepage, flooding, wetness.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: seepage, too sandy, wetness.
Delray	Severe: flooding, wetness.	Severe: seepage, flooding, wetness.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: seepage, too sandy, wetness.
Hontoon	Severe: subsides, ponding, poor filter.	Severe: excess humus, seepage, ponding.	Severe: excess humus, seepage, ponding.	Severe: seepage, ponding.	Poor: excess humus, ponding.
7 Apopka	Slight	Severe: seepage.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
8*:					
Apopka	Slight	Severe: seepage.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
9 Apopka	Moderate: slope.	Severe: seepage, slope.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
10 Astatula	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
11*:					
Brighton	Severe: subsides, ponding, poor filter.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
Brighton	Severe: subsides, ponding, poor filter.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
12*:					
Bluff	Severe: flooding, wetness, percs slowly.	Severe: flooding.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
Manatee	Severe: flooding, wetness.	Severe: seepage, flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, seepage, wetness.	Poor: wetness.
13 Candler	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
14*:					
Candler	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
15 Candler	Moderate: slope.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
16*:					
Candler	Moderate: slope.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.

See footnote at end of table.

TABLE 1.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
17 Candler	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, slope.
18 Cassia	Severe: wetness.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy.
19 Ellzey	Severe: wetness.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
20 Emeralda	Severe: flooding, wetness, percs slowly.	Severe: flooding.	Severe: flooding, wetness, too clayey.	Severe: flooding, wetness.	Poor: too clayey, hard to pack, wetness.
21 Eureka	Severe: wetness, percs slowly.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, hard to pack, wetness.
22*:					
Everglades	Severe: subsides, flooding, wetness.	Severe: seepage, flooding, excess humus.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: wetness, excess humus.
Everglades	Severe: subsides, flooding, wetness.	Severe: seepage, flooding, excess humus.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: wetness, excess humus.
23 Felda	Severe: wetness.	Severe: seepage, wetness.	Severe: seepage, wetness.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
24 Fellowship	Severe: ponding, percs slowly.	Severe: ponding.	Severe: ponding, too clayey.	Severe: ponding.	Poor: too clayey, hard to pack, ponding.
25 Immokalee	Severe: wetness.	Severe: seepage, wetness.	Severe: seepage, wetness.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
26, 27 Kendrick	Slight	Severe: seepage.	Slight	Severe: seepage.	Good.
28 Lake	Slight	Severe: seepage.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
29*:					
Lake	Slight	Severe: seepage.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
30 Lake	Moderate: slope.	Severe: seepage, slope.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
31 Lake	Severe: slope.	Severe: seepage, slope.	Severe: slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, slope.
32 Lochloosa	Severe: wetness.	Severe: seepage, wetness.	Severe: wetness.	Severe: seepage, wetness.	Fair: wetness.
33 Manatee	Severe: ponding.	Severe: seepage, ponding.	Severe: ponding.	Severe: ponding.	Poor: ponding.
34 Martel	Severe: ponding, percs slowly.	Severe: ponding.	Severe: ponding, too clayey.	Severe: ponding.	Poor: too clayey, hard to pack, ponding.
35 Myakka	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
36*:					
Myakka	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
Placid	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, ponding, too sandy.	Severe: seepage, wetness.	Poor: wetness, too sandy, seepage.
Myakka	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
37*:					
Ocoee	Severe: subsides, flooding, wetness.	Severe: seepage, flooding, excess humus.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: wetness, excess humus.
Ocoee	Severe: subsides, flooding, wetness.	Severe: seepage, flooding, excess humus.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: wetness, excess humus.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
38*:					
Oklawaha	Severe: flooding, wetness, percs slowly.	Severe: seepage, flooding, excess humus.	Severe: flooding, wetness, too clayey.	Severe: flooding, seepage, wetness.	Poor: too clayey, hard to pack, wetness.
Oklawaha	Severe: flooding, wetness, percs slowly.	Severe: seepage, flooding, excess humus.	Severe: flooding, wetness, too clayey.	Severe: flooding, seepage, wetness.	Poor: too clayey, hard to pack, wetness.
39 Ona	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
40 Orlando	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Severe: seepage, too sandy.
41 Orsino	Moderate: wetness.	Severe: seepage.	Severe: seepage, wetness, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
42 Paola	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
43*:					
Paola	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
44 Paola	Moderate: slope.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
45*:					
Pits	---	---	---	---	---
Water.					
46 Placid	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
47*:					
Placid	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Myakka	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
47*:					
Myakka	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
48 Pomello	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy.
49*:					
Pomello	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
50 Pompano	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
51*:					
Pompano	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Felda	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Oklawaha	Severe: flooding, wetness, percs slowly.	Severe: seepage, flooding, excess humus.	Severe: flooding, wetness, too clayey.	Severe: flooding, seepage, wetness.	Poor: too clayey, hard to pack, wetness.
52 St. Lucie	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
53*:					
St. Lucie	Slight	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land	Variable	Variable	Variable	Variable	Variable.
54 Seffner	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy.
55, 56 Sparr	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy.

See footnote at end of table.

TABLE L.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
57---------- Tavares	Moderate: wetness.	Severe: seepage.	Severe: seepage, wetness, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
58*:					
Tavares----------	Moderate: wetness.	Severe: seepage.	Severe: seepage, wetness, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Urban land---------	Variable---------	Variable---------	Variable---------	Variable---------	Variable.
59---------- Wabasso	Severe: wetness, percs slowly, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
60---------- Wauchula	Severe: wetness, percs slowly.	Severe: seepage, wetness.	Severe: wetness.	Severe: seepage, wetness.	Poor: wetness.
61*:					
Astor----------	Severe: flooding, wetness, poor filter.	Severe: seepage, flooding, wetness.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: seepage, too sandy, wetness.
Astor----------	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
62---------- Hontoon	Severe: subsides, ponding, poor filter.	Severe: excess humus, seepage, ponding.	Severe: excess humus, seepage, ponding.	Severe: seepage, ponding.	Poor: excess humus, ponding.
63---------- Terra Ceia	Severe: flooding, wetness, poor filter.	Severe: seepage, flooding, excess humus.	Severe: flooding, wetness, excess humus.	Severe: flooding, seepage, wetness.	Poor: wetness, excess humus.
64*:					
Placid----------	Severe: ponding, poor filter.	Severe: seepage, ponding.	Severe: seepage, ponding, too sandy.	Severe: seepage, ponding.	Poor: seepage, too sandy, ponding.
Samsula----------	Severe: ponding, poor filter.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
65---------- Placid	Severe: flooding, wetness, poor filter.	Severe: seepage, flooding, wetness.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: seepage, too sandy, wetness.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE M.--BUILDING SITE DEVELOPMENT

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
2* Arents						
3*:						
Arents						
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
4 Anclote	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
5*:						
Anclote	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
Myakka	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
Felda	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding, droughty.
6*:						
Anclote	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: wetness, flooding.
Delray	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: wetness, flooding.
Hontoon	Severe: excess humus, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: ponding, excess humus.
7 Apopka	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
8*:						
Apopka	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
9 Apopka	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
10 Astatula	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
11*:						
Brighton	Severe: excess humus, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: ponding, excess humus.
Brighton	Severe: excess humus, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: ponding, excess humus.
12*:						
Bluff	Severe: wetness.	Severe: flooding, wetness, shrink-swell.	Severe: flooding, wetness, shrink-swell.	Severe: flooding, wetness, shrink-swell.	Severe: shrink-swell, low strength, wetness.	Severe: wetness, flooding.
Manatee	Severe: wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: wetness, flooding.
13 Candler	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
14*:						
Candler	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
15 Candler	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.
16*:						
Candler	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
17 Candler	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: droughty, slope.
18 Cassia	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness, droughty, too sandy.
19 Ellzey	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
20 Emeralda	Severe: wetness.	Severe: flooding, wetness, shrink-swell.	Severe: flooding, wetness, shrink-swell.	Severe: flooding, wetness, shrink-swell.	Severe: shrink-swell, low strength, wetness.	Severe: wetness, flooding.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
21---------- Eureka	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness.	Severe: wetness.
22*:						
Everglades--------	Severe: excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: wetness, flooding, excess humus.
Everglades--------	Severe: excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: wetness, flooding, excess humus.
23---------- Felda	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
24---------- Fellowship	Severe: ponding.	Severe: ponding, shrink-swell.	Severe: ponding, shrink-swell.	Severe: ponding, shrink-swell.	Severe: shrink-swell, low strength, ponding.	Severe: ponding.
25---------- Immokalee	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
26---------- Kendrick	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Moderate: droughty, too sandy.
27---------- Kendrick	Severe: cutbanks cave.	Slight---------	Slight---------	Moderate: slope.	Slight---------	Moderate: droughty, too sandy.
28---------- Lake	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Severe: droughty.
29*:						
Lake----------	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Severe: droughty.
Urban land--------	Variable--------	Variable--------	Variable--------	Variable--------	Variable--------	Variable.
30---------- Lake	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.
31---------- Lake	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: droughty, slope.
32---------- Lochloosa	Severe: cutbanks cave.	Slight---------	Moderate: wetness.	Slight---------	Slight---------	Moderate: too sandy.
33---------- Manatee	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.

See footnote at end of table.

TABLE 8.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
34---------- Martel	Severe: ponding.	Severe: ponding, shrink-swell.	Severe: ponding, shrink-swell.	Severe: ponding, shrink-swell.	Severe: low strength, ponding, shrink-swell.	Severe: ponding.
35---------- Myakka	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
36*:						
Myakka----------	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
Placid----------	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
Myakka----------	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
37*:						
Ocoee----------	Severe: cutbanks cave, excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, wetness, flooding.	Severe: wetness, flooding, excess humus.
Ocoee----------	Severe: cutbanks cave, excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, wetness, flooding.	Severe: wetness, flooding, excess humus.
38*:						
Oklawaha---------	Severe: excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, wetness, flooding.	Severe: wetness, flooding, excess humus.
Oklawaha---------	Severe: excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, wetness, flooding.	Severe: wetness, flooding, excess humus.
39---------- Ona	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
40---------- Orlando	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Moderate: droughty, too sandy.
41---------- Orsino	Severe: cutbanks cave.	Slight---------	Moderate: wetness.	Slight---------	Slight---------	Severe: droughty.
42---------- Paola	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Severe: droughty.
43*:						
Paola----------	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Severe: droughty.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
43*:						
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
44 Paola	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.
45*:						
Pits						
Water.						
46 Placid	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
47*:						
Placid	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
Myakka	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
Myakka	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
48 Pomello	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.	Severe: droughty.
49*:						
Pomello	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
50 Pompano	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
51*:						
Pompano	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding, droughty.
Felda	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding, droughty.
Oklawaha	Severe: excess humus, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, flooding, wetness.	Severe: subsides, wetness, flooding.	Severe: wetness, flooding, excess humus.
52 St. Lucie	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
53*:						
St. Lucie	Severe: cutbanks cave.	Slight	Slight	Slight	Slight	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
54 Seffner	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness, droughty, too sandy.
55 Sparr	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness, too sandy, droughty.
56 Sparr	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness.	Moderate: wetness, too sandy, droughty.
57 Tavares	Severe: cutbanks cave.	Slight	Moderate: wetness.	Slight	Slight	Severe: droughty.
58*:						
Tavares	Severe: cutbanks cave.	Slight	Moderate: wetness.	Slight	Slight	Severe: droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.
59 Wabasso	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
60 Wauchula	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
61*:						
Astor	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: wetness, flooding.
Astor	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.
62 Hontoon	Severe: excess humus, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: subsides, ponding, low strength.	Severe: subsides, ponding.	Severe: ponding, excess humus.
63 Terra Ceia	Severe: excess humus, wetness.	Severe: wetness, low strength, flooding.	Severe: wetness, low strength, flooding.	Severe: wetness, low strength, flooding.	Severe: wetness, low strength, flooding.	Severe: wetness, excess humus, flooding.
64*:						
Placid	Severe: cutbanks cave, ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.

See footnote at end of table.

TABLE M.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
64*:						
Samsula	Severe: cutbanks cave, excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding.	Severe: ponding, low strength.	Severe: ponding.	Severe: ponding, excess humus.
65 Placid	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: wetness, flooding.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE N.--CONSTRUCTION MATERIALS

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "good," "fair," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
2* Arents				
3*:				
Arents				
Urban land	Variable	Variable	Variable	Variable.
4 Anclote	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
5*:				
Anclote	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Felda	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
6*:				
Anclote	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Delray	Poor: wetness.	Improbable: thin layer.	Improbable: too sandy.	Poor: too sandy, wetness.
Hontoon	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: wetness, excess humus.
7 Apopka	Good	Probable	Improbable: too sandy.	Poor: too sandy.
8*:				
Apopka	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
9 Apopka	Good	Probable	Improbable: too sandy.	Poor: too sandy.
10 Astatula	Good	Probable	Improbable: too sandy.	Poor: too sandy.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
11*:				
Brighton	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
Brighton	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
12*:				
Bluff	Poor: wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
Manatee	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
13 Candler	Good	Probable	Improbable: too sandy.	Poor: too sandy.
14*:				
Candler	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
15 Candler	Good	Probable	Improbable: too sandy.	Poor: too sandy.
16*:				
Candler	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
17 Candler	Fair: slope.	Probable	Improbable: too sandy.	Poor: too sandy, slope.
18 Cassia	Fair: wetness.	Probable	Improbable: too sandy.	Poor: too sandy.
19 Ellzey	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
20 Emeralda	Poor: low strength, wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
21 Eureka	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
22*:				
Everglades	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
22*:				
Everglades	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
23 Felda	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
24 Fellowship	Poor: shrink-swell, low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, small stones, wetness.
25 Immokalee	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
26, 27 Kendrick	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: too sandy.
28 Lake	Good	Probable	Improbable: too sandy.	Poor: too sandy.
29*:				
Lake	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
30 Lake	Good	Probable	Improbable: too sandy.	Poor: too sandy.
31 Lake	Fair: slope.	Probable	Improbable: too sandy.	Poor: too sandy, slope.
32 Lochloosa	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too sandy.
33 Manatee	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too sandy, wetness.
34 Martel	Poor: low strength, wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: thin layer, wetness.
35 Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
36*:				
Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Placid	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
36*:				
Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
37*:				
Ocoee	Poor: wetness.	Probable	Improbable: too sandy.	Poor: excess humus, wetness.
Ocoee	Poor: wetness.	Probable	Improbable: too sandy.	Poor: excess humus, wetness.
38*:				
Oklawaha	Poor: low strength, wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
Oklawaha	Poor: low strength, wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
39 Ona	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
40 Orlando	Slight	Probable	Improbable: too sandy.	Poor: too sandy.
41 Orsino	Good	Probable	Improbable: too sandy.	Poor: too sandy.
42 Paola	Good	Probable	Improbable: too sandy.	Poor: too sandy.
43*:				
Paola	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
44 Paola	Good	Probable	Improbable: too sandy.	Poor: too sandy.
45*:				
Pits	Variable	Variable	Variable	Variable.
Water.				
46 Placid	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
47*:				
Placid	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
47*:				
Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Myakka	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
48 Pomello	Fair: wetness.	Probable	Improbable: too sandy.	Poor: too sandy.
49*:				
Pomello	Fair: wetness.	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
50 Pompano	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
51*:				
Pompano	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Felda	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Oklawaha	Poor: low strength, wetness, shrink-swell.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
52 St. Lucie	Good	Probable	Improbable: too sandy.	Poor: too sandy.
53*:				
St. Lucie	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.
54 Seffner	Fair: wetness.	Probable	Improbable: too sandy.	Poor: too sandy.
55, 56 Sparr	Fair: wetness.	Probable	Improbable: too sandy.	Poor: too sandy.
57 Tavares	Good	Probable	Improbable: too sandy.	Poor: too sandy.
58*:				
Tavares	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Urban land	Variable	Variable	Variable	Variable.

See footnote at end of table.

TABLE N.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
59 Wabasso	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
60 Wauchula	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too sandy, wetness.
61*:				
Astor	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Astor	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
62 Hontoon	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: wetness, excess humus.
63 Terra Ceia	Poor: wetness, low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
64*:				
Placid	Poor: wetness.	Probable	Improbable: too sandy.	Poor: too sandy, wetness.
Samsula	Poor: wetness.	Probable	Improbable: too sandy.	Poor: excess humus, wetness.
65 Placid	Poor: wetness.	Probable	Improbable: too sandy.	Poor: wetness, too sandy.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE P.--WATER MANAGEMENT

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not evaluated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
2*---------- Arents	----------	----------	----------	----------	----------	----------	----------
3*: Arents----------	----------	----------	----------	----------	----------	----------	----------
Urban land-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable.
4---------- Anclote	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
5*: Anclote----------	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
Myakka----------	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
Felda----------	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
6*:							
Anclote	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Flooding, cutbanks cave.	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.
Delray	Severe: seepage.	Severe: seepage, wetness.	Severe: cutbanks cave.	Flooding, cutbanks cave.	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.
Hontoon	Severe: seepage.	Severe: excess humus, ponding.	Severe: cutbanks cave.	Subsides, ponding.	Ponding, soil blowing.	Ponding, soil blowing.	Wetness.
7 Apopka	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
8*:							
Apopka	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
[illegible] Apopka	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Slope, too sandy, soil blowing.	Slope, droughty.
10 Astatula	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
11*:							
Brighton	Severe: seepage.	Severe: excess humus, ponding.	Slight	Ponding, subsides.	Ponding, soil blowing.	Ponding, soil blowing.	Wetness.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
11*:							
Brighton	Severe: seepage.	Severe: excess humus, ponding.	Slight	Ponding, subsides.	Ponding, soil blowing.	Ponding, soil blowing.	Wetness.
12*:							
Bluff	Slight	Severe: wetness.	Severe: slow refill.	Percs slowly, flooding.	Wetness, percs slowly.	Wetness, percs slowly.	Wetness, percs slowly.
Manatee	Moderate: seepage.	Severe: wetness.	Severe: cutbanks cave.	Flooding	Wetness, fast intake, soil blowing.	Wetness, soil blowing.	Wetness.
13 Candler	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
14*:							
Candler	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
15 Candler	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Slope, too sandy, soil blowing.	Slope, droughty.
16*:							
Candler	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Slope, too sandy, soil blowing.	Slope, droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
17 Candler	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Slope, too sandy, soil blowing.	Slope, droughty.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
18---------- Cassia	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Droughty.
19---------- Ellzey	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, fast intake.	Wetness, too sandy, soil blowing.	Wetness.
20---------- Emeralda	Slight---------	Severe: wetness.	Severe: slow refill, cutbanks cave.	Percs slowly, flooding.	Wetness, droughty, percs slowly.	Wetness, percs slowly.	Wetness, droughty, percs slowly.
21---------- Eureka	Slight---------	Severe: wetness.	Severe: slow refill, cutbanks cave.	Percs slowly---	Wetness, fast intake, soil blowing.	Wetness, soil blowing, percs slowly.	Wetness, percs slowly.
22*:							
Everglades-------	Severe: seepage.	Severe: excess humus, wetness.	Slight---------	Flooding, subsides.	Wetness, soil blowing, flooding.	Wetness, soil blowing.	Wetness.
Everglades-------	Severe: seepage.	Severe: excess humus, wetness.	Slight---------	Flooding, subsides.	Wetness, soil blowing, flooding.	Wetness, soil blowing.	Wetness.
23---------- Felda	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.
24---------- Fellowship	Slight---------	Severe: hard to pack, ponding.	Severe: no water.	Ponding, percs slowly.	Ponding, percs slowly.	Ponding, percs slowly.	Wetness, percs slowly.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
25---------- Immokalee	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.
26, 27---------- Kendrick	Severe: seepage.	Slight---------	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Soil blowing---	Droughty, rooting depth.
28---------- Lake	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
29*:							
Lake----------	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable-------	Variable.
30, 31---------- Lake	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Slope, too sandy, soil blowing.	Slope, droughty.
32---------- Lochloosa	Severe: seepage.	Moderate: wetness.	Severe: cutbanks cave.	Favorable------	Wetness, fast intake, soil blowing.	Wetness, soil blowing.	Favorable.
33---------- Manatee	Moderate: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding--------	Ponding, fast intake, soil blowing.	Ponding, soil blowing.	Wetness.
34---------- Martel	Slight---------	Severe: ponding.	Severe: slow refill.	Ponding, percs slowly.	Ponding, percs slowly, erodes easily.	Erodes easily, ponding, percs slowly.	Wetness, erodes easily, percs slowly.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
35---------- Myakka	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty.	Wetness, too sandy, soil blowing.	Wetness, droughty.
36*:							
Myakka----------	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave, slope.	Slope, wetness, droughty.	Wetness, too sandy, soil blowing.	Wetness, droughty.
Placid----------	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, fast intake, soil blowing.	Wetness, too sandy, soil blowing.	Wetness.
Myakka----------	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
37*:							
Ocoee----------	Severe: seepage.	Severe: excess humus, wetness.	Severe: cutbanks cave.	Flooding, subsides.	Wetness, soil blowing, flooding.	Wetness, soil blowing.	Wetness.
Ocoee----------	Severe: seepage.	Severe: excess humus, wetness.	Severe: cutbanks cave.	Flooding, subsides.	Wetness, soil blowing, flooding.	Wetness, soil blowing.	Wetness.
38*:							
Oklawaha---------	Severe: seepage.	Severe: hard to pack, wetness.	Severe: slow refill.	Flooding, percs slowly, subsides.	Wetness, soil blowing, percs slowly.	Wetness, soil blowing, percs slowly.	Wetness, percs slowly.
Oklawaha---------	Severe: seepage.	Severe: hard to pack, wetness.	Severe: slow refill.	Flooding, percs slowly, subsides.	Wetness, soil blowing, percs slowly.	Wetness, soil blowing, percs slowly.	Wetness, percs slowly.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
39 Ona	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy.	Wetness, droughty.
40 Orlando	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
41 Orsino	Severe: seepage.	Severe: seepage, piping.	Severe: cutbanks cave.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
42 Paola	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
43*:							
Paola	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
44 Paola	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Slope, droughty, fast intake.	Slope, too sandy, soil blowing.	Slope, droughty.
45*:							
Pits	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
Water.							
46 Placid	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, fast intake, soil blowing.	Ponding, too sandy, soil blowing.	Wetness.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
47*:							
Placid	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, fast intake, soil blowing.	Ponding, too sandy, soil blowing.	Wetness.
Myakka	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
Myakka	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty.	Wetness, too sandy, soil blowing.	Wetness, droughty.
48 Pomello	Severe: seepage.	Severe: seepage, piping.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Droughty.
49*:							
Pomello	Severe: seepage.	Severe: seepage, piping.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
50 Pompano	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.
51*:							
Pompano	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
51*:							
Felda	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, droughty, fast intake.	Ponding, too sandy, soil blowing.	Wetness, droughty.
Oklawaha	Severe: seepage.	Severe: hard to pack, wetness.	Severe: slow refill.	Flooding, percs slowly, subsides.	Wetness, soil blowing, percs slowly.	Wetness, soil blowing, percs slowly.	Wetness, percs slowly.
52 St. Lucie	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
53*:							
St. Lucie	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
54 Seffner	Severe: seepage.	Severe: seepage, wetness, piping.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Droughty.
55 Sparr	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: slow refill, cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Droughty.
56 Sparr	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: slow refill, cutbanks cave.	Cutbanks cave, slope.	Slope, wetness, droughty.	Wetness, too sandy, soil blowing.	Droughty.
57 Tavares	Severe: seepage.	Severe: seepage, piping.	Severe: cutbanks cave.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.

See footnote at end of table.

TABLE 9.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
58*:							
Tavares	Severe: seepage.	Severe: seepage, piping.	Severe: cutbanks cave.	Deep to water	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.	Droughty.
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
59 Wabasso	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Percs slowly, cutbanks cave.	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty, rooting depth.
60 Wauchula	Severe: seepage.	Severe: piping, wetness.	Severe: cutbanks cave.	Percs slowly	Wetness, fast intake, soil blowing.	Wetness, erodes easily, soil blowing.	Wetness, erodes easily, percs slowly.
61*:							
Astor	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Flooding, cutbanks cave.	Wetness, fast intake, soil blowing.	Wetness, too sandy, soil blowing.	Wetness.
Astor	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, fast intake, soil blowing.	Ponding, too sandy, soil blowing.	Wetness.
62 Sontoon	Severe: seepage.	Severe: excess humus, ponding.	Severe: cutbanks cave.	Subsides, ponding.	Ponding, soil blowing.	Ponding, soil blowing.	Wetness.
63 Terra Ceia	Severe: seepage.	Severe: excess humus, wetness.	Slight	Flooding, subsides.	Wetness, soil blowing, flooding.	Wetness, soil blowing.	Wetness.

See footnote at end of table.

TABLE P.--WATER MANAGEMENT--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
64*:							
Placid	Severe: seepage.	Severe: seepage, piping, ponding.	Severe: cutbanks cave.	Ponding, cutbanks cave.	Ponding, fast intake, soil blowing.	Ponding, too sandy, soil blowing.	Wetness.
Samsula	Severe: seepage.	Severe: excess humus, ponding.	Severe: cutbanks cave.	Ponding, subsides.	Ponding, soil blowing.	Ponding, soil blowing.	Wetness.
65 Placid	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Flooding, cutbanks cave.	Wetness, droughty, fast intake.	Wetness, too sandy, soil blowing.	Wetness, droughty.

* See description of the map unit for composition and behavior characteristics of the map unit.

LAKE COUNTY
MAP SYMBOLS
(CONVERSION LEGEND)

The first capital letter is the initial one of the map unit name. The second capital letter, A, B, C, D, E or F shows the class of slope. Symbols without a slope letter identify nearly level soils.

SCS Map Symbol	U.S. Forest Service or Additional SCS Symbol	Conversion Symbol	Map Unit Name
Fm	Ma	2	Arents
Fm	Ma	3	Arents-Urban land complex
Ac	--	4	Anclote fine sand, depressional
Am	--	5	Anclote, Myakka and Felda soils, depressional
Sw	--	6	Anclote, Delray and Hontoon soils
ApB	WcA	7	Apopka sand, 0 to 5 percent slopes
ApB	--	8	Apopka-Urban land complex, 0 to 5 percent slopes
ApD	WcC	9	Apopka sand, 5 to 12 percent slopes
AsB	AsB	10	Astatula sand, 0 to 5 percent slopes
Br	--	11	Brighton muck, depressional
Im	Me, Ib	12	Bluff and Manatee soils, frequently flooded
AtB	AuB, AtB	13	Candler sand, 0 to 5 percent slopes
AtB	--	14	Candler-Urban land complex, 0 to 5 percent slopes
AtD	AtD, AsD	15	Candler sand, 5 to 12 percent slopes
AtD	--	16	Candler-Urban land complex, 5 to 12 percent slopes
AtF	--	17	Candler sand, 12 to 25 percent slopes

SCS Map Symbol	U.S. Forest Service or Additional SCS Symbol	Conversion Symbol	Map Unit Name
Ca	--	18	Cassia sand
Pd	--	19	Ellzey sand
Em	--	20	Emeralda fine sand, frequently flooded
Eu	Ra	21	Eureka loamy fine sand
Md	Ev	22	Everglades muck, frequently flooded
Fd	--	23	Felda fine sand
Fe	--	24	Fellowship fine sandy loam, depressional
Is	Im	25	Immokalee sand
LuB	Va	26	Kendrick sand, 0 to 5 percent slopes
LuC	Va	27	Kendrick sand, 5 to 8 percent slopes
LaB	--	28	Lake sand, 0 to 5 percent slopes
LaB	--	29	Lake-Urban land complex, 0 to 5 percent slopes
LaD	--	30	Lake sand, 5 to 12 percent slopes
LaF	--	31	Lake sand, 12 to 22 percent slopes
Oc	--	32	Lochloosa sand, 0 to 5 percent slopes
Ma	--	33	Manatee fine sand, depressional
Ib	--	34	Martel sandy clay loam, depressional
Mk	Mk	35	Myakka sand
MpC	--	36	Myakka and Placid sands, 0 to 8 percent slopes

SCS Map Symbol	U.S. Forest Service or Additional SCS Symbol	Conversion Symbol	Map Unit Name
Oe	--	37	Ocoee mucky peat, frequently flooded
Oh	--	38	Oklawaha muck, frequently flooded
On	Sa	39	Ona fine sand
Or	Or	40	Orlando fine sand, 0 to 5 percent slopes
Te	PmA	41	Orsino sand
PaB	PIB	42	Paola sand, 0 to 5 percent slopes
PaB	--	43	Paola-Urban land complex, 0 to 5 percent slopes
PaD	PID	44	Paola sand, 5 to 12 percent slopes
--	--	45	Pits Water Complex
Pe	Ss	46	Placid sand, depressional
PmA	Ms	47	Placid and Myakka sands, depressional
Pn	Po	48	Pomello sand, 0 to 5 percent slopes
Pn	--	49	Pomello-Urban land complex 0 to 5 percent slopes
Po	Ba	50	Pompano sand
S. M.	--	51	Pompano, Felda and Oklawaha soils, depressional
Sc	Sc	52	St. Lucie sand, 0 to 5 percent slopes
Sc	--	53	St.Lucie-urban land complex, 0 to 5 percent slopes
Pg	Os	54	Seffner sand
AbB	--	55	Sparr sand, 0 to 5 percent slopes

SCS Map Symbol	U.S.Forest Service or Additional SCS Symbol	Conversion Symbol	Map Unit Name
AbD	--	56	Sparr sand, 5 to 8 percent slopes
Ta	AwB	57	Tavares sand, 0 to 5 percent slopes
Ta	--	58	Tavares-Urban land complex, 0 to 5 percent slopes
Wa	--	59	Wabasso sand
Wc	De	60	Wauchula sand
--	Ax	61	Astor sand, frequently flooded
--	Do	62	Hontoon muck, depressional
--	Tc	63	Terra Ceia muck, frequently flooded
--	Pa, Pd	64	Placid and Samsula soils, depressional
--	Ss	65	Placid sand, frequently flooded